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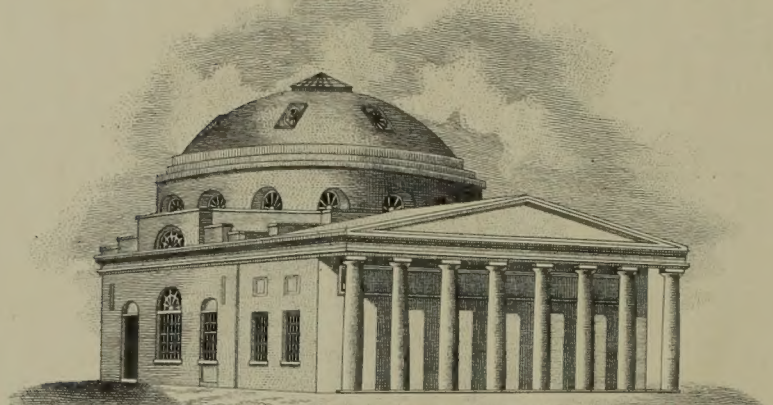

University of Maryland

University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained multiple errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were Richard J. Behles, Historical Librarian/Preservation Officer; María Milagros Pinkas, Metadata Management Librarian; Angela Cochrane and Carol Harling-Henry, Resources Division; Sarah Hovde, Abra Schnur and Megan Wolff, Services Division.

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UNIVERSITY OF MARYLAND

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[1] Noteworthy calligraphy on title page.

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UNIVERSITY OF MARYLAND

THESES

1863 (c)

Beltz, Theodore H.	Pneumonia	27p.
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An
Inaugural Dissertation
On
Pneumonia
Submitted to the examination of the
Provost Regents and Faculty
of Physic of the
University of Maryland
for the degree of
Doctor of Medicine, by
Theodore H. Welt
of Maryland
1863

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Pneumonia

This name is universally applied to the inflamation of the spongy tissue of the lungs. There are numerous varieties of this disease, which we shall now notice. These varieties are founded upon different portions of the lungs, or of the different constituents of any one portion of the lung which may be inflamed, upon the relation of the disease to other diseases with which it may be associated, or upon the general state of the system.

The inflamation may occupy a considerable portion of the lung, embracing sometimes a whole lobe, [illegible] one whole lung.

This is the common form of the disease, and the one which is usually meant when the simple term pneumonia is employed.

For the sake of distinction it is sometimes called lobar pneumonia.

Sometimes small portions of the lungs are inflamed, for example distinct lobules, or parts of lobules with sound lung intervening.

In this case it is called [illegible] pneumonia. Though the inflamation is usually confined to one lung it sometimes involves both lungs and in this case it is termed double pneumonia. When the air cells are chiefly affected the disease is termed vesicular pneumonia. Again when the disease attacks the cellular tissue intervening between the different air vesicles, it is termed inter vesicular pneumonia.

Most generally it includes the air cells, the smaller bronchial tubes, the intervening cellular tissue and the vascular ramification. The pleura is also frequently involved with the substance of the lungs. When large portions of the pleura are affected

the disease recieves the name of pleuro pneumonia, This complaint is generally primary, but is also an accompaniment of other diseases in which case it is called secondary, When associated with a low or typhus form of the disease it is generally called typhoid pneumonia, and when with a bilious disorder wether dependent on the simple derangement of the liver or upon the concurrence of bilious fever it is called bilious pneumonia Finally the disease may be of a short or protracted duration, or in other words it may be acute and chronic, With the following remarks I will leave the arrangement which I have pursued to be deviated by treating first of its anatomical characters, for without a knowledge of these, we can have but a poor idea of many of the symptoms

Anatomical Characters

1st Common or Lobar Pneumonia

In this form of the disease there are three well marked stages,

1st that of congestion,

2nd that of fully developed inflamation,

3rd that of Suppuration,

In the first stage or that of congestion the affected portion of the lung is of a deep red colour, crepitates under pressure and retains the print of the fingers, and if placed in water it still floats on account of the air which is yet retained in some of the sense. but as it is cut it exudes copiously of bloody and somewhat frothy serum, and if the disease be arrested in this stage the lung will resume the healthy appearance if not it passes into the condition of irritation which always follows inflamation,

The second stage, which is that of red hepatization is characterized by a deep reddish brown or grayish red colour, the absence of crepitation when placed between the fingers is occasioned by the density so much increased as to force the air from the lung, and when it is placed in a [illegible] containing water it will sink. The grayish color sometimes observed is owing to an intermixture of particles of black pulmonary matter, and to the brighter hue of the interlobular tissue which is occasionally less congested than the other parts. The softening is so great that the lung may be readily torn and the finger may be passed through the parenchyma with little resistance. When the lung is cut it [illegible] a striking [illegible] to [illegible] this account it is said to be hepatized, and when pressed between the fingers it exudes

a [illegible] fluid which is thicker less frothy and in less ammount than is observed in similar circumstances of a congestive stage and when the lung is exposed to the air it does not shrink as does the healthy lung on account of the cells being filled with concrete fibrinous exudation. In the third or [illegible] stage there are two conditions, one of which is denominated gray softening and the other that of abscess. In the former the lung is compact and dense as in the [illegible] hepatization, but instead of it being of a dark red colour it is of a yellowish gray colour and when it is cut it sometimes [illegible] a [illegible] opaque fluid sometimes tinged with blood. It is much softer than in the second stage so much so that when it is pressed between the fingers it is almost wholly resolved so much so that there is nothing left than the shreds of the solid tissue,

when the hepatization is moderate than when [illegible] and [illegible] [illegible] [illegible] unfrequently occur,

Gangrene is a very rare result but nevertheless it does sometimes occur in common pneumonia,

The three different conditions above described are sometimes but not always distinct, for in the midst of a conjected portion of the lung some spots of red hepatization may appear and and in the midst of the latter some spots of gray hepatization may give a mottled appearance to the lung which is diseased; Sometimes the three may occur in one lung and at the same time, and the gray hepatization being in the centre and surrounded by the red hepatization, and the congestion on the border of the latter. The bronchia both large and small are almost always inflamed

and contain mucus, if one lobe is affected the branchial tube ingoing to that lobe is also affected. In a great majority of cases the [illegible] pneumonia are confined to one lung and the right lung is the one most usually affected. In relation to the part of the lung which is affected the lower portion is more usually affected than any other part.

Lobular Pneumonia

In this variety which is most common in children, the inflamation occupies distinct spots surrounded by healthy tissue. These little islands of inflamation may run together, and form a continuous mass of inflamation. For the pneumonia in children is more common than in adults, to result from a formation from the branchial tubes, to the vesicular structure, and it is probable that the lobular pneumonia generally originates in this way

Vesicular Pneumonia

Under the name of vesicular pneumonia a variety is described in which the inflammation is said to be confined to the air cells of the lungs and perhaps to the smaller portions of the communicating branchial tubes without extending to the intervening cellular tissue. When the lung is cut it exhibits a vast number of gray granules the size of a millet seed and exuding a drop of pus when cut.

Typhoid Pneumonia

When pneumonia is associated with a low or asthenic state of system the disease appears sometimes scarcely to pass the stage of congestion or if it does so the blood [illegible] and yields more of the plastic secretion which gives solidity to ordinary hepatization and the inflammation if long continued is apt to run into gangrene or suppuration. The disease in this case is considered secondary or associated with disease of a low and feeble character,

Chronic Pneumonia

Under this form of the disease may be placed the abscesses which occasionally follow acute pneumonia and continue sometimes for many months before terminating either in health or death.

Symptoms course & terminate

1st Common pneumonia

This is usually ushered in with a chill often very decided, followed by reaction cough, pain in the side, or back part of the chest. When this complaint fully developed it is in most cases characterized by fully developed fever quickening of breath cough and a scanty difficult expectoration sometimes tinged with blood. In the first stage or that of congestion, percussion affects us little knowledge of the condition of the lung. There is usually a slight diminution of the healthy resonance but not so decided to be a ground of diagnosis

Diagnosis

The disease with which pneumonia is most [illegible] to be confounded are bronchitis, pleurisy and [illegible] stage of phthisis. To distinguish bronchitis from pneumonia, the soreness in bronchitis is not so acute as in pneumonia and the pain are usually [illegible] in the upper part of the chest, behind the [illegible], and the expectoration has not the [illegible] rusty character of the sputa of pneumonia. There are also no bronchial respirations and very seldom a permanent want of the respiratory murmur in any part of the chest; and finally there is no considerable dullness on percussion.

Prognosis

In case of lobar pneumonia occupying only a portion of a single lung occurring in persons of a good constitution and without complication of any kind, there is every reason to hope for a favourable issue, cases of this kind almost always end favourably under proper treatment. In debilitated persons and those over middle age terminates more fatal, also persons who are of a

[illegible] nature, pneumonia is sometimes attacked with copious tubercles and run its course in a fatal manner.

Secondary pneumonia is much more fatal than the primary. In billious pneumonia fatality probably depends more upon the febrile of which it is a mere accompaniment than upon the pulmonary inflammation. Though it generally yields to proper treatment but if treated improperly it generally terminates fatal, and the same may be said in regards pneumonia of a typhoid form.

Causes.

Vicissitudes of weather are among the most frequent causes of pneumonia, Sudden exposure to cold when the body is warm, direct violence, acrid or poisonous inhalation, the [illegible] use of the voice, or violent exertions of any kind which accumulates the blood in the lungs, a long continued position on the back is also said to cause this disease.

sufficient to keep them open once or twice during a day which may be effected, by small doses of castor oil, or magnesia, the bowels having been evacuated, resorces should be had to small doses of tartar emetic repeated at short intervales from one tuelfth to a quarter of a grain, every two or three hours, and if this be not sufficient it may be increased to double the quantity mentioned, but should the disease prove obstinate under this treatment it will be proper to resort to some other treatment, by the combination of Opium, Calomel, and ipecacuanha may be given every three or four hours as necessity requiers it, the dose is generally from one half of a grain of ipecac and the same amount of Opium to one grain of calomel, and if this doesnot have the desired effect the Calomel may be increased as well as the opium and ipecacuanha.

and if the patients gums be affected by this quantity the calomel should be suspended or used in very small doses, sufficiently large to keep the patient under its influence, at the same time of this operation a blister may be made useof with great benefit to the patient by placing it upon the chest for the purpose of unseating the inflamation. In the declining stage of the disease expectorant medicines are often useful. If the syrup of squill and emetic may be combined with a little tartar emetic and may be given in such doses as the stomach will allow without being nauseated. Should the strength fail in the advanced stages it will often be found very useful to employ carbonate of ammonia, in doses of two and a half grains increased to five grain doses, at intervals of two hours wine whey may also be given, and in persons of intemperate habits alcoholic liquors should be given as stimulants

or delirium tremens may set in and the patient sink under the requisite depletion. The right plan I think is to administer the stimulants and at the same time to bleed for then while the nervous system is supported the inflamation is diminished

Lobular Pneumonia

The treatment of this disease to be conducted on the same general plan as in ordinary pneumonia, but reference must be had according to the strength of the patient, and to the origin of the disease, and the age of the subject. In very young patients leeches may be substituted for the lancet; tartar emetic may also be given very minute doses for if it be given in large doses it would act too hazardous and perhaps cause death. Calomel is said to be a good remedy, but must be used with care, wine [illegible] should be given as a stimulant, and nutritious diet should always given,

Bilious Pneumonia

In this disease the mercurials should be used in the begining of the disease and should be continued until the mouth be affected, this class of the disease does not bear bleeding as well as the uncomplicated disease, but in general bleeding is resorted to, but in smaller quantities than in any other form of the disease, excepting Lobular pneumonia and Typhoid, the better plan is to commence with an emetic or an emetic cathartic, for this purpose a dose of tartar emetic may be prescribed and followed by a purgative dose of Calomel, to be carried off by a small dose of magnesia after the remissions are decided the sulphate of quinia should be used the same as in remittent without the same complication,

Typhoid Pneumonia

In this disease the best plan is to commence the treatment with an emetic of ipecac and to be followed by a purgative dose of Rhubarb, or rhubarb combined with calomel afterwards the patient should be put immediately upon the use of Opium and ipecac and calomel, the dose to contain a half grain of the first two mentioned to three grains of the latter, which should be given every three or four hours, and it should be persevered in until the gums be affected, but should the calomel purge the mercurial pill may be used as a substitute, so soon however as decided signs of debility appear, stimulant should be resorted to, the milder ones being first resorted to, and if they have not sufficient power, ardent spirits should be employed,

Chronic Pneumonia

In this class of disease the treatment must be directed by circumstances, the most efficacious remedy is probably a continued use of the mercurial pill in small doses so repeated as to sustain a slight sensible impression on the gums, should that fail to leave an impression the iodide of potassium may be used as a substitute for the mercury. Blisters are also very beneficial when supplied to the breast so as to keep up external irritation.

When suppuration has taken place and hectic symptoms appear infusion of wild cherry bark is a very good remedy when it is combined with one of the mineral acids, morphia will be the chief remedy,

And now Gentlemen having considered Intumescence
a subject for an essay to be subjected to
your inspection and asking your benefit
now when you have perused its pages
and viewed its many defects awaiting your
decision I will lay aside my pen and
have finished,
With much respect and many thanks
for the instruction you have given me
I am
Theodore H. Bell
of Maryland

1863

An

Inaugural Dissertation

on

Erysipelas.

Submitted to the examination

of the

Provost Regent & Faculty of Physic

of the

University of Maryland

for the Degree of

Doctor of Medicine,

by

George A. Beatty

of

Maryland.

-1863-

Erysipelas "is a diffused, spreading, inflammation of the skin, involving more or less deeply the sub-cutaneous tissues, preceded and accom-panied by febrile action, and dependent on constitutional causes"

The two principle varieties of Erysipelas, are the Simplex and the Phlegmonous; to these may very properly be added another variety — the Oedematous. Some writers make still further divisions into the Erratic and the Bilious; though cases are sometimes met with that present these peculiarities, the division is practically unnecessary. There is yet another form of inflammation, which, from its very close resemblance to Erysipelas, is

clased with it — I mean Diffuse Cell-
-ular Inflammation.

Looking to its cause, Erysipelas is also
divided into Idiopathic, Symptomatic
and Traumatic. Scientifically speak-
-ing this division is, I think, incorrect;
for, besides, constitutional disturbance
or injury, must there not always be
an idiopathic cause?

Symptoms — Erysipelas is a consti-
-tutional disease; and is therefore preceded
by constitutional derangement: This is
sometimes so slight as scarcely to be
noticed by the patient. Generally there
is a feeling of languor and debility,
accompanied with chilliness, which
may amount to a rigor. The tongue,

at first pale and flabby, afterwards
becomes coated with a yellow mucous,
and, ultimately, assumes a brown and
cracked appearance —. Gastric
derangement is generally decided;
it is manifested by thirst, loss of
appetite, eructations, and vomiting.
Dr Todd lays especial stress upon
this last symptom. "Vomiting, he says,
"is a common symptom at the onset
of the disease, and to such an extent
does this obtain, that whenever I
meet with a patient who has been
suddenly taken with vomiting, and
this vomiting, accompanied with,
or preceded by rigor, I deem it ex-
-pedient to watch carefully for

Erysipelas". Sore throat is another symptom, particularly when the disease attacks the head, for then, the fauces are very apt to be similarly affected. The bowels are almost always constipated, except towards the close of the disease The pulse is quickened and may become rapid, small & weak; towards a fatal termination it is irregular. Swelling of the cervical glands, accompanied with other symptoms, is regarded by some authorities as a sure sign of the advent of Erysipelas of the head and face. The urine, as in all inflammatory diseases, is scanty; it contains an increased amount of urea, and a decreased amount

of the chlorides. Albumen, particularly during the latter stage, is found in it the blood presents a broken-down appearance; and it might be expected contains an increased quantity of fibrin, and a decreased number of red-globules. The nervous symptoms may only amount to a slight headache but in severe cases there is muttering delirium. The cause of this delirium very important as regards the treatment will be considered under that head ..... The local symptoms will be considered under the varieties in which they occur. And first the local symptoms of Simple Erysipelas. In the mildest forms the skin becomes

of a bright red color, - which disappears on pressure - uniform in shade, and with defined margins: there also exists a pricking burning sensation.
At times there is no swelling, or it may be so slight in degree, as to be imperceptible to the sight; it can then readily be detected, by passing the hand from the healty to the affected parts. The swelling of this variety of Erysipelas, depends considerably upon its seat: when it attacks the face, the neck, or the scrotum the cellular tissues in those parts being very loose, it will often be enormous.
Cases of a severe character present the same symptoms combined with a feeling

of tenseness about the skin, which is of a deeper tint, varying in shade, from a reddish yellow to a dark livid red. Frequently, after the third day, miliary vesicles, or large bullae, appear: they are first filled with transparent serum, which becomes yellow, and then semi-purulent.

The period which elapses between the first febrile symptoms, and the local symptoms, varies from three hours to three days or more. — — — — —

It is said that the premonitory symptoms afford criteria concerning the probable severity of the disease; however this may be, when the local symptoms appear, the surgeon can soon tell whether

he has a case of simple or phlegmonous Erysipelas to treat.

In the Phlegmonous variety, the region, according to Dupuytren, are often intermittent in character. The redness is much darker, and does not present so uniform a shade as in the Simple variety; it is darker in the centre, fading as it approaches the margin; it also has the appearance of being more deeply seated. At first, the parts pit on pressure, but soon become hard and resistant. About the fifth or sixth day, this hardness disappears, & there occur fallacious signs of resolution, but the change is for the worse, for it bespeaks commencing p

disorganization of the Cellular tissue.
If there are any phlyctenae they now
burst; the thinned skin beneath ulcer-
-ates, and purulent pus with shreds
of cellular tissue issues forth.
The inflammation may only destroy
the subcutaneous tissue, but it often ex-
-tends to the fascia, and the intermuscular
tissue. The articulations and bones
are sometimes, though rarely, affected.
The muscles do not take on an in-
-flammatory action, but become atrophied
and blackened.
Diffuse cellular inflammation is so
closely allied to Erysipelas in its causa-
-tion, and in many of its phenomena,
that it can very properly be treated

of under the same head. It differs chiefly from the Phlegmonous variety, in commencing in the cellular tissue, and only sometimes spreading to the skin. The skin presents, on this account, only an Erysipelatous blush, and its margins are not abruptly marked. The constitutional derangement, in proportion to the extent of the disease, is severer in character, than it is in Phlegmonous Erysipelas - the pain is not confined to the diseased part.

The Causes of Erysipelas are usually divided into the predisposing and the exciting. But if the disease be dependent - as there is full reason to suppose - upon a specific

cause, this division is insufficient; and the further one of efficient cause is both useful and philosophical.

The Author of the art on Erysipelas in Holmes Surgery, makes these three divisions; and he illustrates each one so beautifully, in the following supposed case, that I will quote it in full.

"Two patients are admitted into the wards of a well ventilated hospital, each having received a similar incised wound. The one is in perfect health; the other is suffering under derangement of the liver or kidneys. Supposing that no special cause of vitiation of the atmosphere is present, the wounds in both cases would heal; the one perhaps

by the first intention, the other probably more slowly and with unhealthy action; but in neither will erysipelas be likely to occur. If, however, there be placed between these patients another suffering with erysipelas, the first will probably still go on well, while the second will be attacked by the disease. Here the previous disease will predispose to the reception of the poison, and the wound will excite its action, while the emanation from the erysipelatous patient will be the efficient cause, without which neither of the two other states will be sufficient to induce the special inflammation in the healthy subject, although an

exciting and an efficient cause be present, the system will have strength enough to resist the influence of the miasm; the predisposing cause is absent" - - - - - -

Among the Predisposing Causes, is a low state of health; produced by unwholesome diet; by long exposure to cold, or depressing causes of any kind; strong mental emotions which make a very decided impression on the nervous powers; and chronic diseases of the kidneys and liver. Menstrual derangements seem to be another predisposing cause "In Costiallal saw a woman who, during five menstrual periods, had erysipelas of the feet"

The chief of the Exciting Causes are wounds both surgical and from injuries; the retention of purulent discharges; Exposure to a current of cold damp air; leech bites; and scarifications of parts affected with oedema.

That we are ignorant of an efficient Cause for Erysipelas, is no reason that it does not exist; or that predisposing Causes when they reach a certain climax, become efficient in their nature. This cause is manifested by epidemy, and very probably, by contagion. Of the former mode of prevalence there can be no doubt; and the regular manner in

which it spreads in hospitals, from bed to bed, is strong proof that it is also contagious in its nature; a well authenticated case is reported of its having spread in regular succession through thirteen beds. The extreme danger of using, on other wounds, a sponge that has come in contact with [illegible] is known to every surgeon; and so great is the caution concerning this that in many hospitals sponges are proscribed.

The Diagnosis of simple, Syphilis is not difficult. Erysipelas is distinguished from it by being accompanied with fever, and appear-

in patches which have no tendency to coalesce or extend. Phlegmonous Erysipelas is easily diagnosed; but Internal Phlebitis, and inflamed Absorbents, may be mistaken for Diffuse Cellular Inflammation; - it is distinguished from the former by the inflammation not running along the course of the veins; and from the ~~former~~ latter by the absorbent glands not being tender on pressure.

Prognosis. [illegible] are to be taken into consideration in forming a prognosis, that it is hard to lay down rules. Cases of the simple and Phlegmonous varieties, who not widely spread, & when they do not

produce a decided constitutional impression, are not fraught with much danger. But when the disease attacks the fauces, the bronchial tubes, the head, a lower extremity that is oedematous, a limb that has suffered amputation, a very young, or an old person, one addicted to intemperance, or of a broken constitution, or consequent upon acute disease or one suffering under chronic disease of the kidneys or liver, the prognosis is unfavorable. The prevalence of the disease at the time, as an epidemic, makes determination much more uncertain.

Treatment

Of late years, the constitutional treatment of Erysipelas, as of all other

acute inflammatory diseases, has changed the active antiphlogistic treatment, once so much lauded and relied upon, is now, as a rule, considered dangerous. This change of practice, according to many authorities, was brought about by a change of type in acute inflammatory disease, from sthenic to asthenic, produced by a lowering of the vital power of the human race by the ravages of the Cholera.

That the human constitution should have been so profoundly affected by the ravages of this disease is, I think, highly improbable, even if we do not take into consideration that it is a disease that almost always kills its subjects, and, unlike phthisis

and syphilis, does not first poison, and then leave them to live long enough to taint posterity; and why should Cholera have done in so short a time what the combined efforts of scrofula, syphilis, & plague, had failed to accomplish?

Is it not more probable that the change of treatment is due to an improved knowledge brought about by the advances which Medicine has made during the last thirty years? — - - - - -

The constitutional treatment of Erysipelas is, of course, to be regulated by its severity; some cases are so mild that they will recover under no treatment; others so severe that they will prove fatal in spite of the best. General bloodletting

is to be abstained from as useless or dang-
-erous; it cannot lessen the materies
morbi in the blood, nor cut short the
inflammation, but will certainly
deprive the patient of the vital force which
he may require to overcome the disease.
Calomel purges, frequently repeated, will
prove injurious; milder remedies should be
resorted to to keep the bowels open.
The most important indication of the consti-
-tutional treatment of Erysipelas, is to keep
up the patients strength, for the disease
mostly attacks persons of impaired
health and is essentially asthenic
in its nature — This indication is ful
filled by the use of nourishing diet, stim-
-ulant, and tonics ---

It may be laid down as an [illegible] that food which can be perfectly digested, will never injure, either a well or a sick man. The patient's diet should therefore be as nourishing as he can digest; beef tea & light diet, are generally suitable. In mild cases there may be no need for alcoholic stimulants; but in severe [illegible] they should be our chief [illegible]. Wine, brandy, or strong malt liquors, may be used; a good rule is, to be guided by the patient's taste, giving him that to which he is accustomed. It should be given, as well as other food, in small quantity at once; for it is always dangerous in serious diseases to overload the stomach, lest vomiting be set up, and it refuse to [illegible] [illegible] [illegible] to be administered

depends upon the severity of the disease.

[illegible] brandy, may be required every two or three hours. The question here arises how are we know when we have carried our stimulants too far; when this has been done, the patient generally becomes very sleepy, and the skin dry, or vomiting may ensue, or the breath may smell of alcohol. This last symptom is diagnostic; the others may be tested by laying the stimulants aside for a time. To determine whether they be due to excessive or deficient stimulation, Dr Todd says that delirium is not necessarily an indication for stopping stimulants, and that their continuance in increased quantity will often mitigate it.

The question here arises, is this delirium due to the circulation of a poisonous blood in the brain, or to the inflammation having spread to its meningies? Post-mortem examinations reveal no inflammatory changes; and very often the vessels of the pia mater contain less blood than they should; at other times they contain more, but this is only when the "moribund state has been prolonged, accompanied with heavy breathing and especially with convulsions — the same state may perhaps, be produced by the [illegible] retarding the venous return. — — — — — — — — — — — —

— The use of the [illegible] [illegible] [illegible]

— Erysipelas [illegible] [illegible] [illegible] [illegible] notice by Dr G Hamilton Bell in 1851; since

which time, it has come more and more into favor; and is now regarded by many, as curative in the disease. Many theories have been brought forward concerning the modus operandi of the agent, and to them I would add the following — In so serious a constitutional disease as Erysipelas, the digestive functions must be greatly, or totally impaired. This, impairment may be caused by the tissues of the digestive apparatus loosing their normal contractility; for as all tissues become diseased, this is one of the 1st changes that occurs — the tincture of iron by its powerful styptic powers may counteract this tendency, and thus enable the patient to assimilate the ingesta he takes,

thereby giving him strength to withstand the depressing effects of the disease. The large doses in which it is given by some English surgeons (from ℥j – ℥ij in twenty four hours) seems to indicate that it may have this local - action. From ℥j – ℥iij during the day is the dose generally given:

Quinine is a very valuable remedy in Erysipelas, and one that is often resorted to.

Local Treatment.

The Local Treatment of Erysipelas has reference to the local inflammation and to the disease at large - So the disease at large because it spreads by continuity, and thus reacts upon the constitution. This doc-

was first put forth — Hunter and though it has never been proved, is deserving of consider-ation. Several arguments may be brought forward in its support. And first — the disease spreads by contiguity; Second, its spreading is often arrested by the nitrate, when so applied as to separate the affected, from the healthy parts. Third, the disease is inoculable.

The nitrate of silver, highly lunded; more pronounced caustic powder is often a very valuable local remedy. It is either applied as a strong solution over the inflamed part; or a line is drawn with the solid stick, which separates the diseased part from the surrounding healthy parts. The success of the application of the nitrate in this

latter mode seems to depend upon the depth to which the disease has affected the subcutaneous tissue, for if the line do not extend in depth as low as the disease, it goes under the line & consequently spreads beyond it.

The sulphate of iron, first used by Velpeau is no seldom or never resorted to.

The Tincture of Iodine has of late been very generally used, but its beneficial action is doubtful. Collodion, from its constringing effect on the parts, has been high recommended.

In the Phlegmonous variety, free exit should of course be given to the pus that has formed, incisions and punctures should not be resorted to until suppuration is inevitable, then incisions sufficiently free & numerous to ensure

the exit of the pus should be made. The very free incisions formerly practised, from the large loss of blood they necessitated, should always be avoided. After incisions are made, fomentations should be applied, but only for a short time; they will otherwise promote needless suppuration.

Position of an affected limb should always be attended to. Pressure has been highly recommended, but is no seldom used, being considered highly dangerous —

An

Inaugural Dissertation

on

Hydrocele.

Submitted to the examination

of the

Provost, Regents & Faculty

of Physic,

of the University of Maryland.

for the

Degree of Doctor of Medicine

by

William Thomas Wirt,

of

Maryland.

Anno Domini.

1863.

From a knowledge of the unbridled passions of the world, to rush into every kind of vice and misery; we are not supprised to find the human family suffering from the uncontrollable ravages of disease and death. And from the manner in which the world is peopled, we see the necessity of exter=pating from the human system all forms of hidden poisons, to prevent the newly born offspring from early suffering and sudden death.

And it is my honest belief that a large majority, if traced back to the original cause will be found to spring from this disease. And thank heaven it has been my sweet privilige to learn from the Hon. Faculty

of this University – how to appreciate its
privileges and to instigate human suffering.
The opinions we form while at this
school are those which in after life
we will confidently and constantly
be acting. The comfort or misery of
many families –
If we fit ourselves by your judicious
and dilligent instructions, for its
high functions and pursue it there
– after in earnestness and truth, it
will probably conduct us to an
honourable competence, and it will
assuredly prove a salutary school
of mental and moral discipline;
affording ample scope and exercise
for the intellect; it is convenient

with objects that tend to elevate the thoughts— to temper the feelings and to touch the heart.

To us are entrusted in more than ordinary measure, opportunities of showing Kindness to our neighbour and of doing good to our afflicted fellow being.

"The profession of medicine, having for its end the common good of mankind, knows nothing of national enmities, of political strife, of sectarian division. Disease and pain the condition of its ministry, is disputed by no misgivings concerning the justice or honesty of its clients' causes, but dispensing its peculiar benefits

without stint or scruple to men of every country, party, rank and religion and to men of no religion at all, And like the quality of mercy of which it is the favourite hand maid, "it blesses him that gives and him that takes," reaching continually to our own minds and understandings the most impressive lessons, the most solemn warnings.— Surely no one would dare without adequate and earnest preparation to embark in a calling such as this, so capable of good if rightly used, so full of peril to ourselves and to society if admitted ignorantly or unfaithfully — in our most successful efforts, we are but the honoured instruments of God for He heareth our requests, and saves us from destruction.

So many and diversified are the opinions and theories respecting this disease, that it has become a bye word and abomination to the human race; but notwithstanding all this they still pursue the very identical course of vice and misery to obtain it. So dark and mysterious a cloud hung over the cause, nature and origin that it was upon this the Quacks made their immence fortunes, and rose to such eminence through the public press—, But Aurora awakening in the morn, swept the last speck of darkness from the oriental chambers, reflecting such brilliant light on the Alapatha

Schools and to make Quackery tremble to its very foundations; and may her noble sons continue to triumph until the last supporter of this disgraceful system be discarded from society and erased from the world.

It consists in the effect of certain morbid poisons generated and usually communicated by promiscuous sexual intercourse.

It may be described as possessing three different forms or stages each having symptoms peculiar to themselves. The first or which is known as the primary form may be known by the following symptoms. Inflammation and ulceration of the parts to which the morbid poison is applied, and inflammation of the neighbouring

lymphatics and next or what may be called partly the sequel of the first or what is known as the secondary form comprising the following symptoms, soundry eruptions of the skin, ulceration of the throat, inflammation of the eyes, and inflation and caries of the bones and joints. There is moreover described by some Authors a third form, but which seems to me to be but a further development of the second stage, and is known as the tertiary; consisting of various eruptions, rheumatic pains falling off of the hair, deafness, ulceration of mucous membranes and all kind of anomalous cachetic complaints which are the sequelae of syphilis when

it operates on an originally bad constitution or is aggravated by ill treatment.
The primary symptoms of this disease are undoubtedly contagious, and communicable by inoculation with the matter from the ulcer. The secondary symptoms, which depend on a general contamination of the constitution, are commonly supposed on very high authority, not to be communicable by inoculation; but they are certainly capable of transmission from a father or mother to a foetus in utero; from a nurse to a sucking infant, or from an infant to its nurse; it is suspected, but not proved, that they may be carried from husband to wife

The history of this disease has been and is almost a perfect battle field for those who controvert existing opinions; some contend that it was known from the earliest ages; others that it was unknown until the eighteenth century.

It is believed and argued that some of the ulcers on the genitals which are mentioned by some of the earliest writers were probably syphilitic and that ulcers arising from sexual communication were well known in the middle ages; and that the primary and secondary effects of syphilis were, in those days, like many affections, confounded with leprosy.

Syphilis appears also to have been known almost from time immemorial in China. It has been said by very good authority and I must confess I am of the same opinion that wherever prostitution is tolerated and unclean restricted to few women amongst crowds of men, there the infection will be generated; which afterwards spreads through society at large. The irregularities of man are at all times punished by generation of disease and loss of health, and it would be difficult to believe in a superintending providence if this transgression of divine and human law should be allowed to pass unpunished.

One circumstance which goes to prove the antiquity of this disease is this, that whilst the French army between the years 1494 and 96 was besieging Naples, a new and most terrible disease sprung up, rebellious to any known method of treatment; attacking high and low, rich and poor; sparing neither age nor sex: consisting of ulcers in the parts of generation in both sexes, which were speedily followed by affections of the throat and nose; by corroding ulcers over the whole body; by excruciating nocturnal pains, and frequently by death, whereas not one word that can be construed into any similar

affection is to be met with distinctly stated in any writer before that period. There are a great many who think that syphilis did exist from very early ages, but it received increased virulence in the fifteenth century in consequence of war, famine, and the intercourse of foreigners; circumstances which in all times have produced an aggregated type of the disease.

The next question that will occupy our attention is the difference between the two kindred diseases syphilis and gonorrhœa. Are the poisons of these two diseases identical? I agree with most eminent surgeons and from observation that they are by no means alike.

It has been declared by our honourable and most learned professor of Surgery, that there is as much difference in the two diseases as there is between Pneumonia and Phthisis but that they are most probably elaborated under similar circumstances, both poisons may have under different circumstances, infinite varieties of effects and infinite degrees of intensity. Ricord has declared that although the pus of a syphilitic ulcer may inoculate a mucous membrane and produce gonorrhoea, but that gonorrhoea will not produce primary syphilitic ulcers, nor will secondary symptoms result unless there be a chancre in the urethra.

Primary syphilitic ulcers or chancres may be caused by the application of the syphilitic virus to any surface, mucous or cutaneous, entire unbraded, or ulcerated. Their most frequent seat is the genitals; and in men they are mostly found on the inner surface of the prepuce, or the furrow between the prepuce and the corona glandis, or the margin of the frenum, and in women about posterior commissure or the posterior cul de sac of the vagina; parts which should always be carefully searched for such ulcers. The time at which they first make their appearance is usually said to be from three to ten days from infection, but it is more probably that

the virus operates progressively from the first moment of its application and that although no ulcer may be formed, yet that a portion of skin may have imbibed the poison, which may produced its characteristic effects; or it may have found its way into a follicle; so that the virus is in full operation, although no actual ulcer may be perceived till later. The average duration of a syphilitic ulcer produced by inoculation is about twenty five days -

Primary syphilitic ulcers present many varieties, which may be arranged under the following heads -

1st The Hunterian or indurated chancre a slow torpid ulcer surrounded by adhesive

inflamation; 2nd the Non Indurated or pustulous ulcer marked by early and free suppuration; 3rd The Phagedenic or ulcerative; 4th The Sloughing. The Hunterian or Indurated chancre, is generally found on the common integuments or on the glans penis. It may begin either as a pimple or as a patch of excoriation which heals up leaving the center ulcerous. Let us suppose this ulcer to have been made by inoculation with the point of a lancet; during the first twenty four hours the puncture reddens; in the second and third days it swells slightly, and becomes a pimple surrounded by a red areola; from the third to the fourth day the cuticle is raised by a turbid fluid into a vesicle which

displays a black spot on its summit;
consisting of the dried blood of the
puncture; from the fourth to the fifth
day, the morbid secretions increase and
become purulent and the vesicle becom
-es a pustule with a depressed summit.
At this period the areola attends had
increased begins to fade, but the
adjacent tissue becomes infiltrated
and hardened with lymph. After
the sixth day, if the cuticle and
dried pus which adheres to it be
removed, there is found an ulcer
resting on a hardened base; its
depth equal to the whole thickness
of the true skin, its edges seeming
as if cleanly cut out by a punch-

its surface covered with a grayish pultaceous matter, and its margin hard, elevated and of a redish-brown or violet color. The ulcer feels to the finger like a little cup of cartilage set in the flesh. The Non-Indurating or suppurative, may be said to have four stages — 1st it is a small itching pimple or pustule, which bursting displays — 2nd, a foul yellowish or torny sore, attended with slight redness and swelling, and spreading circularly. It may or may not be covered at first with a dirty brown scab. In the 3rd stage it throws out indolent fungous granulations, is usually stationary after it has ceased to ulcerate, and before it begins to heal;

In the 4th stage it slowly heals; cicatri-
-zation being preceded by a narrow vascu-
-lar line. If the ulcer be seated near the
fraenum, it is almost sure to perforate
-it. Phagedenic chancres are extremely
rapid in their progress and highly
painful; their surfaces yellow and
dotted with red streaks; their shape
irregular; their edges ragged or
undermined; and the discharges
thin profuse and sanious. The
margin looks puffy and odematous
showing a low degree of vitality; but
sometimes firm and of a vivid red.
Sometimes they eat deeply in the
penis or undermind the skin; but
in general they spread widely but not deeply.

The Sloughing form of this chancre may arise from three different causes 1st great local irritation; contagion; and infection, it is generally found on the genital organs; in the cleft of the nates, in the groin or at the upper and inner part of the thigh. It is most especially found in young prostitutes, having been exposed to wet and cold, privation of solid food and the abuse of ardent spirits. It usually commences as a high painful boil and much elevated; with a mucous discharge from the vagina, and redness of integuments about the pudenda. There are darting and stinging pains, at first intermittent; but afterterwards a constant symtom.

When ruptured it discharges a stratum of adherent dirty colored flocculi, mottled with blackened points of reddish brown and gray. After this it enlarges in breadth and depth; the edges everted, and surrounded by dusty inflammation and diffused puffy swelling. The discharge reddish brown, fetid and sometimes very dense haemorrhage; next severe constitutive fever set in with loss of sleep, anxiety, restlessness, thirst and exhausting diarrhoea; which if not relieved may produce death in about three weeks; and as delirium is rare, the patient retains an miserable consciousness of disease suffering to the end.

chancre in the urethra may be suspected even in gonorrhoea, if the discharge is very capricious, sometimes thin scanty and bloody, sometimes thick and profuse and if there is one painful indurated spot. It may also be felt as a small hard tumor through the urethra. It may be characterized by excessive pain during micturition; by swelling and nocturnal priapism by want of sleep, anxiety, restlessness, and considerable fever.

The disease in the female requires no distinct observation. They do not cause as much pain, as in the male, but are slower to heal, especially if interfered with by the urine.

A very important point and one which the operation should be used most diligently, is the curette use of the vagina, of which I spoke before, since they cause very little pain but a good deal discharge. When the syphilitic sores have been destroyed within five days, the patient is said to be liable to secondary symptoms. The Hunterian anxiety seems to be the only one from which such symptoms are to be dreaded, or in which preventive treatment is required, and that dues of the suppurative, ulcerative and sloughing varieties, and those attended with suppurative bubo; do not inoculate such pus

It seems also that repeated syphilitic infections begets a kind of protective against fresh attacks; and the production of syphilitic sores, does not confer liability to secondary symptoms, but as a general thing seems to mitigate those that may already exist. The ordinary means of distinguishing a chancre from any other sore, is that it is situated on the genitals; that it has followed a suspecious connection, it is circular with a hard base, elevated edges and if treated simply it is hard to cure. Inoculation is another and a more certain test: it may be done by inserting the virus in the thigh, and if it produce a similar sore, it may be set down as of syphilitic taint and should be treated as such.

The next point in the history of this disease which engages our attention is in regard to the Treatment. Upon this depends the happiness or misery of many souls, and from this the future success of our profession, and now we see the great importance of reflecting well upon the plan that we intend to adopt; we study the case before us and select from our immence vocabulary of drugs those from which we expect to obtain the greatest good, at the least expense to our patient, so that all classes of society might be able to obtain means necessary for the restoration of health,

without infringing too deeply upon means absolutely necessary for their support and maintenence. Since we are thought ful about the requiset means, we should not be unmindful of the many peculiar ities that exist in some person in regard to certain drugs, while some can take any quantity of certain substances there are other in whom the smallest particle would throughout in hysterical convulsions or something more injurious to the system, Since there is nothing if taken into the system that may not prove injurious, if ignorantly used or administered in too large quantities. In ancient times the treatment of this disease was quite tedious and

difficult, those who were so unfortunate
and to contract it lingered for a long
time without experiencing any change
for the better, but after suffering were brought
under notice and thought by some to be
a specific on account of its producing
such violent salivation that the patient
might spit away, and of course the first
thing thought of was to cram the
system as full of it as possible, and
if by chance it should fall upon a
scrofulous person, then they had
not only the poison of syphilis to
contend with but also those of
mercury and scrofula combined,
three of the most terrible forms of
disease that could possibly fasten upon

But since by the aid of a mighty providence the science of Medicine has advanced to such a degree as to enable us to mitigate its ravages without so much suffering to humanity.

The indications are 1st. to destroy the poisonous virus and heal the breach of surface as soon as possible.

2nd To prevent the occurrence of secondary symptoms.

If a patient applies as soon as he perceives the chancre it will be advisable to destroy it with caustic. The best for this purpose are the caustic Potassae or concentrated Nitric Acid. Then the parts should be covered with lint. Then some mild aperient should be given

so as to keep the bowels open and enjoin rest low diet and wrap the penis in a cloth dipped in warm water. Even if it has lasted for more than a week, it will sometimes be expedient to destroy it but this will not generally give security to secondary symptoms. But if the chancre presents a well marked indurated base, or if the penis is swelled or inflamed, or the patient feverish, or if there is any swelling or tenderness in the groin this cannot be done; but decomposition of the poisonous ulcer may be induced by either of the following mixtures lotions or applications.

℞. Hydrargyri chloride mite ℥j.;
Mucilaginis Acaciae .... ℥ss.;
Liquoris Calcis ..... ℥vss.;
Misce .....

~ or ~

℞. Hydrargyri sublimati corrosivi gr.vj
Liquoris Calcis ..... ℥iij.
Misce.

or

℞. Hydrargyri sublimati corrosivi gr.i.
Aquae Distillatae ℥j.
Misce.

If there is much irritation a poultice of Anthemis Nobilis flowers, or of bread and water may be applied to the pnis. After granulations have commenced

it may be treated with astringent lotions and from time to time it may be touched with the crude Argentium Nitras or with a solution of;

℞. Liquoris Zinci Chloridi ℥ss.;
Aquae Distillatae ℥vij.
Misce.

The next point for our consideration in the treatment of this disease is in regard to the Constitutional remedies to be used. From observation and a moderate degree of experience, the first drug which is suggested to my mind is Mercury which has been considered by some as certain

a specific in this disease as the Quinia Sulphas in intermittent fever, but I think this is saying a little too much for it; since from statistical accounts there has been more cases of syphilis cured without Mercury than of Ague without Quinine. There is but one form of chancre in which I think mercury can be of any avail and this the Hemterian or what is know as the hard chancre, there is no stage of the disease in this form in which it cannot be efficiently used, from the first appearance of the chancre, to the last stage of ulceration and cachexia.

"Dr. Wood of Philadelphia in his high praise of Mercury says: 'Though chancres will undoubtedly get well without mercury yet they will, so far as I can judge from personal observation, yeild more readily under its influence; and there are, no doubt, depraved states of system occuring in syphilitic patients, as in others, in which mercury proves injurious by further impairing the blood. But in the pure uncomplicated disease, with no taint of scurvy, scrofula, or other depravity besides its own, I have no doubt that mercury is the most reliable remedy in all its states and stages, with the single exception of Iodide of potassium in the

rheumatic pain and the periosteal swellings, which often linger after the other symptoms.

If a patient apply early and has not been put on Mercury yet you may commence with the Pilulae Hydr. gr v three times per day until the gums are slightly touched or if you want to produce the effects sooner you may use the

℞. Hydrargyri Chloride Mite gr x ℥:
Conserve of Roses q.s.
Misce. Fiat Pilulae Viginti.

Give one every three hours until the gums are affected and then lengthen the time so as to keep up a gentle impression on the system for some considerable time.

The effects of mercury may be induced in several ways, by fumigation or by strong mercurial ointment rubbed in on the inside of the thighs. from 3ß — 3j may be used every morning by the patient- because the flesh is better adapted for receiving it; his hand should be protected by a glove well softened in oil and tied around the wrist:

Violent Salivation should never be indulged in by any one. for it is never the result of any good but of considerable harm to the patient and is said to be worse than the total abstinence from mercury all together; if it do not take place

it should be treated by mild aspperients and washes composed of.

℞. Tannin ..... ʒj.
Brandy f ʒss
Misturae Camph f ʒ vss.
Misce ..... — — —

or chlorate of Potash. or by Whaland creasote gargle, composed

℞. Inf Cinchona. ʒj
Myrrh ʒj
Creasote ʒß-
Misce

If phymosis be present while there is any inflamation, fomentations and water dressing may be applied and a mild astringent lotion may be injected frequently

between the prepuce and glands, or the prepuce be divided by the probe pointed bistory.

As soon as the fraenum has been perforated by an ulcer, it should be completely divided by the scissors.

If phymosis is caused by small ulcers at the prepuce they should be touched by Argentum Nitras or Cupri Sulph. or Ung. Hydr Nitras.

The Non indurated or soft chancre may be treated upon almost the same principle with this exception that in the constitutional treatment I am opposed to the exhibition of Mercury in shape or form, notwithstanding it is used daily,

both in the wards of our Infirmary and also in private practice. There is thought to be not so much danger of secondary symtoms in this as in the former, yet I think a mild preventitive course should be instigated, since it does not injure the patient in the least but adds greater security to his future enjoyment and happiness. I would recommend the following

℞. Ferri et Potassae Tartras ... ℥j
Aquae Distillatae ℥vi.
Misce three times per day ℥j

in humble opinion as a much better preparation than any form of Mercury that could be given.

chancre in the urethra should be diag-
-nosed as early as possible and treated
upon the most active principles, for
in my opinion there is greater
danger of the more violent second-
ary symtoms and because it is
so remote from actual application
of those substances upon which
we depend for its decomposition.
The patient should be confined
to his bed, low diet strictly
enjoined and he should
commence the use of injections
as soon as the inflamation has
been sufficiently subdued.

℞. Hydrargyri chloridum Corrosivum gr. 1;
Aquae Distillatae ℥j.

Misce. For an injection.

or.

℞. Plumbi Acetas gr v.;
Zinci Sulphas gr iii.;
Opii Pulvis gr i.;
Oleaginous Mixture ℥ iiss.

Misce. Inject three or more times a day.

℞.

Hydrargyrum Pilulae gr v.

three times per day until the gums are touched, and then often enough to keep up the effect for some time.

A bubo is nothing more nor less than an internal chancre, situated about the glands in the groin arising from a syphilitic ulcer.

The true diagnosis may be known by inoculation with the virus taken from it. The treatment if acute is the same with that of an acute abscess, the indications are to induce resolution and suppuration. by rest apperients and saline medicines, low diet and warm fomentations. Leeches are recommended but they should be used very cautiously as each bite may produce a chancre. Another plan has been pursued, but not altogether sacrifactory by a solution

℞. Hydrargri Chloridum Corrosivum gr. v.
Aquae Distillatae ℥j.
Misce. Apply by compresses to the inflamed bubo.

If another abscess forms and the skin becomes inflamed it must be laid open by the lancet at the most projecting point; and dressed by poultices, fomentations may be given until the gums are done unless constitutional.

The secondary symptoms generally occur about six weeks after the primary, sometimes sooner or later especially if the patient has been indulging in the wine cup or exposed to much wet and cold weather. They first manifest themselves upon the skin and mucous membranes of the throat and then upon the bones,

There is often some considerable difficulty in forming a true diag-nosis of this form of the disease since so much disgrace has been attached to it; that a little deviation from the truth or an open insult is the first thing thrown in our face for even mentioning it:
But let us pursue the same course in this as our Hon Professor of Obstetrics in his diagnosis of pregnancy "never rely upon the tongue but on the belly," so let us rely upon the charac-ter of the symptoms that present themselves. If they present a copered colored eruption about the throat loss of hair or nodes rheumatic pains

it is quite probably that they are syphilitic.

The drug which has been found to do the most good in this form of the disease is the Iodide of Potassium. Patients who have suffered the most excruciating torments from this form of the disease, have been relieved in a very short time by the use of this drug almost like a charm

℞, Iodide Potassium ℥j.
Aquae Distillatae ℥iss.
Misce. ℥j three times per day,

this plan of treatment should be pursued in for a considerable time and the ballance of treatment in accordance with the character of the symtoms.

The common excoriated sore throat which most frequently accompany this disease may be treated by an soothing gargles or applications. Mopping the throat with a solution of the

℞. Argentium Nitras gr. vi.
Aquae Distillatae ℥j.
M. or

℞. Zinci chloridum gr. vi.;
Aquae distillatae ℥j.

When ulcers exist it is generally advisable to use gargles of

℞. Hydrargyri sublimati Corros. gr. ij.;
Acidi Hydrochlorici gtt. xxx.;
Mellis ... ℥j.;
Aquae Distillatae ℥vij.

Misce — For gargle.

The pain of nodes or of rheumatism may be relieved by blisters often repeated. — all other symtoms must be counteracted as they appear.

The free use of the Iodide of Potassium is considered a very good remedy against this form of the disease.

Tertiary symtoms are generally of long standing and extremely difficult to treat; they consist of inflamation of the brain, eye and testes, which are to be dealt with according to the symtoms and intensity of the disease.

1863

An
Inaugural Dissertation
on
Pleuritis
Submitted to the examination
of the
Provost, Regents and Faculty of Physic
of the
University of Maryland
for the Degree of
Doctor of Medicine
by
Charles L. M. Marlin
of
Maryland;

Pleurisy.

In point of frequency this disease ranks third, in the list of acute pulmonary diseases, Bronchitis and Pneumonia, taking precedence in this regard. Pleurisy occurs, either as an independent or concomitant pulmonary affection, It shall be my endeavour, at this time to treat of it as it occurs — independently. When it thus occurs, the inflammation is usually general, that is, it extends more or less over the entire Pleural Membrane on one side, to this rule there are however some exceptions, as it occasionally extends to both sides

or may be confined to a small portion of the pleural membrane of one side.

Acute Pleuritis is divided into three stages. 1st The period from the commencement of the inflammation to the accumulation of an appreciable quantity of liquid effusion within the pleural cavity. 2nd The period during which the liquid is either accumulating or remains stationary. 3rd The period during which the liquid effused is being removed by absorption.

The inflammation is of the adhesive kind, accompanied by pain of a sharp lancinating character, by the pouring out of serum, of coagulable lymph, of pus or blood, the right

Side is more frequently affected than the left, the [illegible] is also more frequently met with in [illegible] [illegible].

[illegible] [illegible] [illegible] [illegible] [illegible] be most convenient to speak first of the changes found [illegible] [illegible] in the parts affected. Like all other inflammations, Pleuritis is attended with redness in the part affected, this however is dependent upon the injection of the sub-serous blood vessels rather than [illegible] in the proper serous tissues, this is soon succeeded by the effusion of coagulable lymph, serous fluid, or both, we also frequently have the formation

of false Membrane, thus, when lymph is first deposited upon the surface of the inflamed pleura, it is soft, it soon however shows signs of vitality. red spots appear, scattered over the surface, these multiply and lengthen into reddish streaks, at length they are perceived to be small vascular canals, which inosculate with the vessels of the pleura, and the lymph as false Membrane, becomes a constituent part of the living frame, this membrane is often found as bands, which bind down, and draw togather the opposed surfaces of the pleura, the formation of this membrane is sometimes very rapid.

Anderal who [illegible] [illegible] [illegible] [illegible] asserts, that in nineteen hours, after the Pleura of rabbits with acetic acid, he has found soft and thin false Membrane traversed by numerous red lines, Membrane, already vascular has been found in the bodies of persons who [illegible] [illegible] after [illegible] or five days illness, which in others who had lived for many months after the invasion of the disease no traces of such vascular membranes have been found, it is clear therefore that the organization of lymph does not depend wholly upon the length of time which it has been poured out, the previous state and habit

of the patient has much more to do with it, thus, plastic lymph and early adhesions, are to be much more expected in young, strong, and healthy subjects, unorganized lymph, granular deposits, copous and abiding serous effusions tending to become pariform in such as are old, feble, and of scrofulous diathesis, the extent of these membranes varies according to the extent of the inflammation, in some instances we find effused after death a clear serous or watery fluid, without colour and perfectly transparent, this however may occur independently of inflammation of the pleura, from some obstruction to the circulation, it then

constitutes a species of [illegible], very often the fluid effused in consequence of inflammation, is turbid or whitish sometimes, it is distinctly purifornis at others, it is more or less tinged with or composed entirely of blood, which has exuded from the membrane by what is capillary haemorrhage. these fluids are always without smell unless there has been communication between the cavity of the [illegible] and external air, either through an opening in the walls of the chest, or through a pulmonary fistula into the trachea or through some opening into the Oesophagus, in such cases it becomes exceedingly offensive, in consequence of

the generation of gases, the quantity varies from one oz to several pints, the consequences of the effusion of this fluid are that the Lung is first compressed - if the quantity continue to increase, other parts are displaced by pressure. the boundaries of the chest on the affected side are distended, and even the abdominal visera, may be thrust out of their natural position, the Lung is pressed into a kind of flat cake; is pushed backward and upward and made to occupy the smallest possible compass. The Diaphragm, is pushed down causeing a prominence of right or left Hypochondrium, the Splein and Stomach being displaced on the left;

or the Liver on the right side, the ribs are separated, the intercostal spaces are widened and pushed out to a level with the bones, in fact, the whole side is smoothe, and obviously larger than the other, if the left side is filled and distended with the fluid, the Heart is forced out of its position, and is heard seen and felt to beat, on the right side of the Sternum, a case illustrative of this fact I have myself seen within the past year, in the Baltimore Infirmary, in the person of a young strong and healthy Negro girl, whose Heart was distinctly heard and felt to beat on the right side, she under the judicious treatment

of Prof Chew entirely recovered —
When the Lung is pushed up along side
of the vertebral Column, and is covered
over (as is very frequently the case) by
strong layer or layer's of membrane
we might at first fancy that it
had been entirely destroyed, it was
in cases of this kind, and when
the Lung effused consisted of
Pus, that it was formerly supposed, the
Lung was sometimes entirely destroyed
by suppuration, this however has been
ascertained to be incorrect, for upon
carefull examination, the Lung can
always be found, and can almost
always be inflated, sometimes however
its cellular texture is obliterated

the opposite [illegible] of the [illegible], and smaller air tubes, adhere togather, the Lung will not admit air, it looks like a piece of muscle, and is then said to be Carnified. Such is a general account of the Anatomical Characters of Pleurisy, as they are disclosed to us by an examination of the body after death. We now come to the consideration of the Physical Signs, which are of the greatest importance in forming a correct diagnosis,

Before effusion has taken place percussion is quite clear, and no other Auscultatory Sign is apparent than some diminution of the-

respiratory murmur, consequent upon deficient expansion of the lung.
Soon after the onset of the disease a peculiar and characteristic sound is heard about the middle of the chest. Friction sound. this sound is thought by some to be caused by an irregular deposit of lymph upon the surface of the pleura by others it is said to be due to the enlargement and congestion of the bronchial mucous membrane. The opposed surfaces of which rub together. and thus produce the sound, the grating movement may be felt by applying the hand flatly to the affected side. it is of very short duration. it vanishes as soon as union of the opposite surfaces

takes place, or as soon as they are pressed apart by the effused liquid, this is considered a valuable sign. the most decisive signs however, are those afforded after effusion has commenced, We have then diminution of the healthy resonance, which goes on untill it amounts to perfect — flatness. At first it is found in the most dependent parts of the chest. it gradually rises higher and higher, with the advance of the disease, the dulness can be made to change its position, by causeing the patient to change his posture. The dullness, almost always being found in the most dependent portion, as the fluid

tends to gravitate to the lowermost part of the Cavity, there are however some exceptions to this rule, as when the Lung, and consequently the liquid, are confined by adhesions, and in Cases in which the whole cavity is filled with the effusion. The respiration is always more or less enfeebled by the pain. The more so after effusion has taken place. It goes on diminishing with the increase of the fluid, and the consequent compression of the Lung. In Cases of large effusion it entirely disappears, in such parts as the Lung is little in Contact with the Chest. The healthy murmur is superseded by bronchial respiration, which is dependent

upon compression of the air cells, which thus more readily convey the vibrations of the bronchi to the surface; when the liquid is very abundant this sound entirely disappears, except in the region between the Scapulae, and sometimes even there, When a thin stratum of liquid is confined between the lung and side of the Chest, the tremulous, quivering, or bleating sound denominated Ægiphony, from its resembling the bleating of a Goat, is heard, this modified sound is heard most frequently between the third and sixth ribs, and between the Scapulae, it is most obvious in women and Children, in consequence

of the higher pitch of their voice.

The vibratory movements of the walls of the Chest are similarly affected with the sound of the voice, being entirely suppressed when the effusion is copious, but still distinctly visible where the lung adheres, the affected side does not participate in the movement of respiration.

Symptoms. Pleurisy is usually ushered in with a febrile Chill, and a sharp pain in the affected side, the pain may come on before the Chill, or both may make their appearance at the same time, in character the pain is sharp and severe, as though it were produced by the thrust of

a sharp instrument, it is usually situated just below one or the other nipple, though its situation may vary considerably, according to the seat of the inflammation. It is increased by inspiration, Coughs, pressure upon the intercostal spaces, and by lying upon the affected side. The pain generally moderates considerably in the course of three or four days, as the expectoration increases. The Cough is at first dry and short, or attended with a slight mucous or frothy expectoration, sometimes when there is some bronchial inflammation it is more copious

and occasionally, streaked with blood, it is generally attended with a great deal of pain, and the patient endeavours to restrain it. The Breathing is always more or less embarrassed in consequence of the pain produced by a full expansion of the Chest, it is also much more rapid than natural, in consequence of the smaller quantity of air taken in, as the disease advances, the the pain and difficulty of breathing increases, it is now however caused by compression of the Lung by the effused liquid, this want of breath is especially felt where the effusion is at once sudden and copious,

The Decubitus is at first on the Sound side, but after the acute pain has subsided this becomes difficult in consequence of the pressure of the contents of the Chest upon the Sound Lung which is the only one capable of performing the office of respiration hence it lies upon his back inclining towards the affected side.

The Fever is generally Considerable and is attended with all the characteristic phenomena of this mode of disease Such as Chill followed by heat of the Skin, full quick pulse, loss of appetite, furred tongue, Scanty urine &c, the pulse is usually

frequent full and tense, but sometimes when the pain is exceedingly violent, it is contracted. the Fever usually moderates in four or five days. In rare cases there is some delirium

The Course and duration of a case of Acute Pleurisy, varies very much according to the circumstances. it sometimes terminates in one or two weeks, or may go on for several Months. Double Pleurisy is always much more dangerous, than that which is confined to one Pleura,

Causes, The most frequent is exposure to Cold. other Causes are mechanical injuries, Such as irritation or perforation of the Pleura. by the sharp point of a

fractured rib, the transfer of irritation from without, or the sudden checking of habitual discharges &c.

Diagnosis, The only diseases with which Pleurisy is likely to be confounded are Pleurodinia, Pericarditis, and Pneumonia, in Pleurodinia, the physical signs characteristic of Pleurisy are wanting, with the exception of the diminished respiratory murmur, and a slight diminution of sonorousness on percussion. there is also an absence of fever and cough, the pain is also more shifting. The diagnosis between Pleurisy and Pneumonia, can be readily made, by observing the

following characteristic signs and symptoms which are found in cases of these diseases in Pleurisy the pain is sharp and severe, and is usually concentrated, it is generally experienced, just below the level of one or the other nipple, while in Pneumonia it is dull and moderate, when the case is uncomplicated the expectoration is mucuous and transparent, in Pneumonia it is viscid and rusty, in Pleurisy we have friction sound and Ægophony. in Pneumonia, the crepitant rale exists, Bronchial respiration may exist in both diseases, but it is heard more extensively in Pneumonia. dullness on percussion is more

extensive in Pleurisy, but is found at an earlier period, and it also often changes its position as the patient is made to assume one or another posture. The whole Sternum may be flat on percussion in Pleurisy, but never more than one half in Pneumonia. When the hand is laid upon the affected side in a case of Pleurisy, there is an entire absence of the vibratory thrill. While in Pneumonia, this vibration is markedly increased. In Pneumonia distention of the Chest, bulging of the intercostal spaces, and the displacement of the Heart [illegible]

and Stomach, which is found when there is a copious Pleuritic effusion, are entirely wanting, and lastly, a patient suffering from Pneumonia, is generally indifferent as to the position in which he lies, whereas in Pleurisy he always lies upon the affected side or upon his back inclining towards that side.

The prognosis, in cases of uncomplicated Pleurisy is generally favourable,

Treatment, In the onset of the disease, when you have high inflammatory Symptoms, And where the patient is strong and robust, free blood letting is demanded, this

can be carried to a considerable
extent; indeed there is no disease
in which the free abstraction of
blood is better borne, than this,
the quantity to be taken at once
varies from twelve to twenty four
ounces, to be repeated if necessary,
if however you have any suspicion
of Tuberculus existing, You must
restrict yourself to local bleeding
by Cups or Leeches, Care should
also be taken to keep the bowels
open, Cathartics act favourably
by producing their derivative effects,
Saline Purgatives, given in doses of
from one fourth to one eighth of an
grain is considered a very

valuable remedy, in the early stages of the disease. After the Febrile symptoms have been reduced, it is advisable to bring the system under the influence of Mercury. Some practicioners give Mass Hydr. and Opium, others prefer Calomel and Opium. In cases where the use of Mercury given by the Stomach, is in any way contraindicated, it may be used externally by inunction, either the Strong Mercurial Oint, or the Lin Hydrag may be used with very good effect. The patient must be kept on low diet.

When under treatment of this

kind, the effusion does not subside we must resort to diuretics, a very good combination is Pulv Scilla gr j Pulv Digitalis gr ½, Mass Hydrag gr v given every three or four hours, under treatment of this kind, I have seen the effused liquid entirely disappear

In cases in which the fluid cannot be removed by absorption and in which the functions of the Lung, on the affected side are abolished. And the other, verry much interfered with, by the pressure, where in fact the patient is in danger of suffocation the fluid must be let out by tapping the Thorax, this operation when demanded, should be performed

as soon as possible. the operation
should be performed with the
trocar, the puncture should be
made between the fifth and sixth
ribs, if made lower down there
is danger of wounding the
Diaphragm.

To the Members of the Faculty,
I would offer my sincere thanks
for the kindness, and attention.
I have recieved at their hands
during my attendance upon their
instructions. And trust that
my feble effort may meet
with their aprobation.

Chas. M. Martin.

Maryland

Class 1862 & 63.

1863

An
Inaugural Dissertation
on
Alcohol.—
Submitted to the Examination
of the
Provost, Regents & Faculty
of Physic,
of the
University of Maryland;
for the
Degree of Dr. of Medicine.
by
Charles W. Lamb
of
Maryland.—

Gentlemen! In the brief space usually devoted to the subject of a "Thesis", while there is much room for the display of one's knowledge of a given subject, there is but little room for the display of that most valuable quality of a Physician, sound judgment, or practical "common sense".

To know all about a disease or remedy, and to be able to express that knowledge on paper is an accomplishment of value; to diagnose the one, and properly apply the other, or in other words to reduce that knowledge to practice, to apply it with discrimination and judgment, is a talent of the highest order.

In submitting the following dissertation, I do so with the full knowledge that my study of medicine is but begun; that receiving a degree brings with it neither knowledge nor understand-

ing; and that while I may have acquired a sufficient knowledge of the different branches of physic to enable me to receive a degree, I have but laid the foundation; the superstructure is to be built from materials collected by observation, practice, and the hard study of the experience of others. — 'Practice makes perfect' is more applicable to medicine than to almost any other department of science or art; and he who occupies a position in the arena of the medical world, and neglects to combine observation with practice is guilty of a high degree of criminality, and is unworthy of having the health and lives of the community, entrusted to his charge. — I now propose to submit a brief dissertation on that important article of the Materia Medica - viz Alcohol -

Alcohol.

The manufacture of Alcohol is of no recent date. People of antiquity were familiar with it, and all nations, even the most ignorant savage, prepare articles of drink which contain it. It is a substance possessing many properties, and like various other articles of the Materia Medica, may be used for evil, as well as for good. — It has received a great degree of attention from scientific minds; and had we never seen the article, we might readily believe from what has been said and written about it, that it was a substance of rare properties; and so it is. It is stimulant, astringent, diuretic, diaphoretic, escharotic, antiseptic &c.

The manufacture of the article in a pure state is of more recent origin, and its many valuable properties have caused it to become an important article of commerce. — It is the product only of

fermentation, and is never found ready formed in any substance. It constitutes fifty per cent of ardent spirits, from which it is obtained by distillation.

If to a solution of sugar, at a temperature between 70° & 80° F. a little putrescible azotized matter be added, the sugar will be converted into alcohol, with the escape of carbonic acid. It is required that the cane sugar should be first converted into grape sugar. Alcohol is therefore a product of the metamorphosis of sugar under the influence of a ferment. The yellow insoluble matter deposited by beer in the act of fermentation, called yeast, is the best alcoholic ferment; but blood, white of egg &c will effect the same purpose.

When the articles are placed in a vessel effervescence begins; when this has ceased, and the liquid becomes clear, it will yield alcohol on

distillation. — Chemically, alcohol is the hydrated oxide of ethyle; or ether, with the addition of one atom of water (C^4H^5O+HO). The grape sugar is divided into four eq alcohol, eight of carbonic acid, and four of water. When first obtained, the alcohol is very weak; by a second distillation it becomes stronger. To obtain it pure it must be redistilled with one half its weight of coarsely powdered quick lime. — It is a colorless limpid fluid, with a strong pungent, and acrid taste; a penetrating and burning smell; and a specific gravity of .794 (anhydrous), boils at a temperature of 176° F.; burns with a very hot blue flame, without smoke; but though often subjected to the most intense cold, has never been frozen. In the act of dilution it contracts in volume with the evolution of a considerable degree of

heat. — It combines with water in all proportions, and when diluted to the extent of one half constitutes proof spirits. — It has great stimulating and intoxicating properties, and in over doses is poisonous. In its pure state it is never used medicinally, but some article is employed in which it is an active ingredient as brandy wine &c. In the latter form it possesses less intoxicating properties than in ardent spirits, owing to chemical combinations it forms with the mucilaginous and saccharine principles. That it is not digestible is proven by its characteristic odor on the breath; by its having been detected in the blood, urine, sweat &c. and in one instance, in the brain in sufficient strength to be inflammable. When taken into the stomach it enters the circulation

unchanged, and is exhaled from the lungs in the form of carbonic acid and water.
Its property of combining with water in all proportions, and with other substances in definite proportions, makes it one of the most useful agents for many purposes.
In the cabinet and laboratory it is invaluable. In the one its antiseptic properties are called into use in preserving specimens; in the other, the chemist would be quite at a loss without his spirit lamp; and these are but a little of the uses to which it is appropriated in these departments.
As a solvent its uses are well known; the latter is one of its most useful properties.
Many substances are insoluble in any other liquid; others yield their active principles

to it alone. As a remedial agent it displays its qualities to the greatest advantage. It is useful and certain in its action, and is one of the few substances which have become indispensable to the Physician.

It is an universal stimulant. In many conditions of disease this property renders it the only means of supporting the system to enable other agents to act, or to enable it to combat with the advances of the disorder. It excites the system, imbues it with newness of strength, enables it to cast off injurious impressions, and fortifies it sufficiently to withstand great attacks. Thus, in the various forms in which it is offered to us, it presents in itself a field in which the greatest discriminating powers of the Physician are

brought into play.

Its effects upon the brain are peculiar and characteristic, and the results of its action as various as its combinations.

When applied to the cuticle it produces by its speedy evaporation a sense of coolness, followed by heat and redness; and if continued sufficiently long, inflammation.

Its affinity for moisture bestows upon it astringent properties, and causes condensation and contraction of tissue, coagulation of blood &c. There is one condition attended with great distress and danger, under which patients in a low state are apt to labor, and which should not escape notice, viz bed-sores. To prevent this the astringent properties of alcohol, render it highly useful.

While the judicious use of so powerful an agent is attended with so much good; its abuse, or injudicious use is attended with evils equally as great and certain. With some articles it is incompatible; in some diseases its use is contra-indicated. Given to persons laboring under diabetes mellitus it but adds to the disease by increasing the formation and deposit of sugar. In a high state of febrile action it but adds fuel to the flame; and in conditions of health, when taken in excess it increases the emotions and passions; destroys the control over the mind, causes some to become cheerful and friendly; others domineering and disputatious. These, with perversion of the senses, loss of muscular power, insensibility &

are among the fruits of over indulgence.
By its long continued use, the system becomes accustomed to its presence, and requires a greater quantity to produce its intended effects. At length it becomes unable to sustain itself without having recourse to it, and yearns for its accustomed stimulus till the deluded worshiper of alcohol is compelled as it were in self preservation, to choose between two great evils, Mania a Potu, in consequence of withholding his draught, or indulgence, and be hurried towards the tomb with a worn out frame and dethroned reason.
Not only does it thus act as a slow, but sure poison - but often instantaneously.
Many instances are on record in which one

excessive draught has caused death by overwhelming the powers of life.

To persons predisposed to apoplexy, it acts as an exciting cause to that disease; in others it produces inflammation of the brain and its meninges; in others gastritis, tuberculosis &c &c. Much might be said in regard to acute and chronic poisoning by the abuse of alcohol, but enough has been said to convince us of its great power, both for good and evil. The appearances presented on dissection of those who have died from its effects, are not in accordance with the phenomena presented during life. When death occurs suddenly no pathological appearance is presented; the stomach and brain being at once overwhelmed. In more protracted cases

there is a strong odor of alcohol - with congestion of the brain, stomach &c, pleural adhesions, various diseases of the heart; fatty degeneration of the liver & kidneys; hypertrophy, atrophy - inflammation &c.

While the use of alcohol may bring on an attack of phthisis, where a predisposition to the disease exists - (which however has been doubted) it has been a matter of observation that drunkards seldom die of this disease.

Considering its tendency to produce degeneration of the various viscera, this is a singular fact, and has lead to important changes in the treatment of this, and kindred diseases. The free use of malt liquors or the habitual use of small quantities of distilled liquors has been recommended, and tried. To this

practice, questions of a moral nature have arisen.
Certain it is, that confirmed drunkards have been
made by the too oft repeated prescription of alcohol.
Balto Feby 14th 1863.

1863

Clinical Report of Cases

Submitted to the examination of the Provost Regents and Faculty of Physic of the Maryland University for the Degree of Doctor of Medicine

By James Watt

Maryland

self

none seems to be no subject more appropiate, than the duties, trials and success of the young practitioner, who with "his blushing honors," sets forth in life determined to succeed, if industry, patience and skill can accomplish success. Nor are his obstacles of a light nature. Whether it be in the shape of Quackery or of old women; he still requires that nicety of judgement which shall neither give offence to the knavery of the one, or the ignorance of the other; for be it known, that in some classes of individuals, neither reason nor Common Sense can banish the

disciple of "Hahneman nor the meddling and often dangerous midwifery of "the granny".

Of the trials of the young practitioner, those who have gone before, can speak with experience, but a few observations will not be inappropiate. In the first place, he is expected to be on hand promptly when summoned. No unnecessary delay, he must come quickly, independent of any personal Considerations. Miss— has fallen into an ordinary Convulsion or attack of Syncope, and is thought to be "dying". Young practitioner arives almost breathless

examines patient attentively.
Is uncertain wether it be "an
hysterical fit" or a fainting spell."
At lenght after due Consideration,
he determines to apply a stimu-
lant in the shape of Cold water,
which he applies liberally. After
a few Convulsive struggles, Miss—
opens her eyes and is borne off
to bed. But does young practition-
er get any Credit, and more im-
portant still does he get any
pay for this assiduous attention
to an unimportant and trifling
Case— I fear he neither gets
the one or the other. In illus-
tration I will give several

examples, not only of a disposi-
tion on the part of individuals
not to Compensate "the Doctor"
but also to deny him that mile
of gratitude which is always
due from one individual to an-
other when we have rendered to
that fellow man, our Skill, labor
and time. Dr — a young prac-
titioner of much practical ex-
perience, was called to a case of
fracture of Clavicle, the subject
being a young man, able bodied
and a miller by trade, and fur-
thermore, able according to ap-
pearances to Compensate the
Doctor. Dr — Skillfully reduced

the fracture using more than
ordinary care in the manage-
ment of the case. But neither
money nor gratitude were his re-
ward, not even "a vote of thanks"
were offered him for his attention
to the case. Comment is useless.
There is another trial to which
"the young Doctor" is subject, that
of being considered "the slave of
the public; subject to be annoyed
by a preremptory summons; the
patient forgetting that interest
and professional pride, will
always hasten the speed of
his medical attendant, let
it be either the one or the other

motive, which actuates him, and
let him not exclaim to "the Doctor"
in harsh and insulting tones,
"did you come as soon as you were
sent for." Another form of diffi-
culty with which he meets, is
the prevalence of Quackery and
Quack medicines, as he is call-
ed upon sometimes either to
meet the one in Consultation
or endorse the virtues of the other.
Let him do neither. Assume a
firm stand and refuse either
to hold consultation with them
or endorse their medicines.
You may suffer in the purse
at first, but principle will

ultimate triumph. Again we are called upon, sometimes to endeavor to rectify the mischievous interference of old women in cases of ordinary midwifery, where little or no interference is called for. Especially does this happen after the birth of the child, when "the granny" Considers it her bounden duty to grasp the Cord, and pull until she lacerates the Cord or inverts the uterus or Causes dangerous and sometimes fatal hemorrhages. And yet in some Cases this incompetent and ignorant creature is allowed to go out among

the people to repeat the same thing on the first opportunity, instead of being severely punished for malpractice, which might be considered manslaughter by those who knew the facts of the Case, and also knew how the Case Could and Should have been managed. And yet the class of people who employ these old women, will frequently ~~re~~ refuse to employ "the young Doctor" simply because he is young. Such idea of medical Knowledge and experience, is a pair of spectacles a bald head, a wise and venerable Countenance, who'sc hews

books, and busts to a few dus-
ty maxims of ancient practice
to help them along in the road
to fortune. But there is no doubt
a better time a coming for "the
young Doctor". A time let us
hope, when his services will be
better appreciated, and when
Quacks and their nostrums
and old women and their herbs
shall have disappeared forever.
"Having as I hope not inappro-
priately offered a few prelimi-
nary remarks. I will now
present for your Consideration
Several Cases which have fal-
len under my ~~Observation~~

observation in the wards of the Baltimore City and County Alms-House.

1st Case of Self-mutilation.

G— aged fifty was admitted on the 3rd October, having a short time previously amputated his penis, about an inch and a half from the root of the organ. Profuse hemorrhage occured, which was soon arested by the application of ligatures to the dorsalis penis artery and arteries of Corpus Cavernosum. As only about an inch or more of the organ remained; it was found necessary to pass a gum Catheter into the bladder

which was secured and allowed to remain. As a portion of the skin around the root of the penis had been cut during the act of mutilation, this was brought together and secured by sutures. There were also several linear incisions of slight depth in the abdomen, but these did not require any surgical interference.
Oct 4th Patient passed rather a restless night, urine dribbles out between catheter and mucous membrane of urethra. Does not complain of much pain in the seat of injury. Bowels costive. Water dressing to the parts and

half ounce of Castor Oil to open bowels. Oct 5th Removed Catheter cleaned and replaced it, Some little tenderness in bladder. Suppuration about being established, wound appears healthy. No erysipelatous appearance about the insertion of sutures. Some discharge of mucous on withdrawal of Catheter. Oct 6th Suppuration fully established. Catheter removed entirely, owing to the fact that a continuous trickling of urine exists; which runs down upon and excoriates the patients Scrotum. Bowels opened freely by Ol. Ricini. Oct, 8th Patient about the Same

as yesterday. Oct 9th Sutures re-
moved from wound, but ligatures
around arteries not yet come away.
Wound improving, can pass this
water without much difficulty
and but little pain. From this
time forward, the patient Contin-
ued to improve, and was discharg-
ed on the eleventh of November, the
wound being fully Cicatrized.
Wish there be no doubt in regard
to this case, the remaining portion
of the penis can be seen at the
Almshouse. Of the motives that
induced this unfortunate man
to thus mutilate himself is not
for me to speak.

Was it the result of temporary aberration of mind, or Could an individual posessed of reason Commit such an act, Knowing it must henceforth subject him to the taunts and reproaches of his more fortunate fellow being Reason tells us that no man posessed of his faculties Can Commit such an act.

2a Case of Burn. Wm H— aged 21 years was admitted December 5th having twenty four hours previously been severely burnt by the explosion of a Camphene lamp, which being filled while lighted, exploded with Considerable force;

thus causing the accident. The burnt surface involved nearly the whole of the left side of the thorax, extending from the sternum in front to the commencement of the outer third of the ribs posteriorly, and extending from near the clavicle and axilla down to about midway between the last false ribs and the crest of the ilium. Extending also from the axilla, it included the anterior aspect of the arm to about midway the forearm. It also included the left side of the face. This burnt surface involved to a considerable extent, the skin

and cellular tissue, which on the second day after admission began to slough and smell gangrenous and very offensive, which with the pain of the burnt surface, widently Caused great exhaustion to the patient.
A dressing Composed of Liq. Sodae Chlor. ℥vi Aqua Oii. was ordered to be applied to the sloughing surface, and full diet, with an ounce of brandy every two hours, and M. Opii gtt xxx at bedtime.
Dec. 6th Patient passed a restless night, Complains of great pain in the burnt surface, and that the solution Liq Sodae Chlor.

"Smarts" too much. The Liq Sodae Chlor was changed for Ac. Nitrici ʒi Aquae ℥ii in which a soft rag was ~~to~~ saturated and applied especially to those portions of the sloughing surface which smell most offensive. Although the patient complained of some little pain after this application, still it acted with great benefit to the affected part, removing the slough and giving it also a healthy appearance.
Tr. Opii forty drops at bedtime and continue the brandy.
Dec., 7th. Patient much better, but still complains of Ac. Nitrici lotion.

Liq Sodae Chlor was substituted
for it. Brandy every four hours.
One half ounce Ol. Recini. ℞. Opii gtt xxx
at bedtime. Dec. 8th About the
same. Bowels acted well since
last report. As portions of slough
remained, a yeast-poultice was
ordered to the part, and the
brandy to be given every two
hours. ℞. Opii gtt xxx at bedtime.
Dec, 9th A considerable portion
of the remaining slough was
removed to day, and poultice
ordered to be continued. Patient
slept well, and does not com-
plain of as much pain as a
few days previously, and feels

much stronger. Brandy every four hours, with Ol. Ricini ℥ss and ℞ Opii gtt xxx at bedtime if necessary. Dec. 10th Patient slept well, bowels acted freely; feels much better. As the slough was now completely removed the poultice was discontinued, and Cold water dressing substituted. Brandy every six hours, with ℞ Opii gtt xxx at bedtime if necessary. Dec 11th Patient improving daily. Brandy to be stopped and half ounce of ℞ Gentiana Comp. to be given every six hours. Bowels acts freely without the oil. To have ℞ Opii gtt xxx at

night if necessary. Dec 12th.
Patient says he feels much stronger and thinks "he can eat all that he can get." Bowels still act freely once per day. Continue ℞ Gentiana Comp. Owing to the wish of the patient the water dressing was changed for one of Ceral Simplex. Dec, 31st Patient may be considered as in a fair way of recovery, although the healing process will be necessarily slow, as observation has taught me, that the majority of ulcers resulting from burns, cicatrize slowly, somewhat after the manner of an indolent

ulcer. One of the best applications immediately after the surface is burnt, is Aqua Calcis Ol. Lini each four ounces Creasotum forty drops applied twice during twenty four hours on a soft rag or piece of lint. Sometimes however the Creasote produces slight febrile symptoms when of Course it can be discontinued, and a lotion of Plumbi acetatis et Opii or the simple water dressing substituted. In a Case of burn admitted some time since, a Comparison was made of the relative merits of the Aqua Calcis and Ol. Lini without

the Creasole and also in Combination with it. The experiment was made upon one individual, who had both mammary glands burnt from the same cause and at the same time. Both applications were used for several weeks and at the end of that time, preference was given the Ol Lini Aqua Calcis and Creasole in Combination.

3d On the Case of a negro admitted, with both feet badly burnt, simple water dressing alone was used and so far with the best results, one foot has entirely healed and the other is progressing

favourably. Of Course, good diet,
Tonics &c. are necessary in a
majority of these Cases, and should
never be omitted, owing to the
great Constitutional disturbance
Caused by the burnt surface, and
also the seperation of the slough
which is more or less of a gan-
grenous Character. In the Case
of W— the burn involved the
skin and Cellular tissue, be-
ing what is termed a burn of
the fourth degree as Classified
by Dupuytren.

(Case 4th.) Spontaneous expulsion
of placenta in a primipara.

The books tell us that the

placenta is sometimes expelled through the os externum of itself, without the help of the medical attendant. But this is rare, as in several Cases which I have seen, I only observed one and that in a primipara. The placenta was small and was expelled by an effort of the uterus, exactly resembling a regular labour pain. Another medical gentleman, who has seen a good many Cases in the institution, says that he has never seen but one Case, as far as he can recollect. One fact is certain, if after the child is

delivered, the practitioner should wait any great length of time for the placenta to be expelled of itself, he will in a great many cases, wait in vain, and the sooner he removes it from the vagina, the less trouble he will have and the less pain will he cause his patient.

5th Case of Delirium Tremens. treated by subcutaneous injection. A man was admitted laboring under all the prominent symptoms of delirium tremens; absence of sleep, fancying that he saw devils, rats and other animal around

and about him. M. Opii gtt XL
was given every two hours, to
the extent of one drachm, when
this failing to have effect; it
was determined to use Chloro-
form by inhalation. After using
this remedy as far as it could
be done prudently, it was found
that it rather increased than
allayed the excitement under
which the patient laboured.
Resort was then had to the
method of subcutaneous in-
jection, and with the best
result. A solution of Morph.
Sulph of the strength of one
grain of the salt to an ounce

of water, was used, and in the course of a short time the patient became quiet, and soon fell asleep.

Case 6th Treatment of ulcers.

Indolent ulcers are generally found more difficult to heal perhaps than any other form of this solution of Continuity. Water dressing, adhesive strips, Argenti Nitras, poultices, Ointments &c. are sometimes used for months, with but little amendment in the sore, and this effect is probably increased by poor diet, want of cleanliness and an absence of ben-

tilation, for these are all agents in effecting either a good or bad result, as they are present or absent. On the form of ulcer resulting from secondary syphilis and characterised sometimes by a peculiar Chancre like appearance, I have found the following lotion to act very well as a stimulant to the part. ℞ Iodine one half ounce Pot Iodide twenty grains. Water one pint applied twice per day; lint being saturated in the lotion and applied to the sore. Also the Ung. Or. Hydrarg Rubri answers

very well in the same form of ulcer, but at the same time small doses of Hydrarg Iodide might be use with advantage. together with good diet &c.

Sometimes Hydrarg Bi Chlor. grii Syr Sarsaparilla ℥iv S. Teaspoonful 3 times per day, will prove useful as a Constitutional aid in the treatment of this form of secondary syphilitic ulcer.

Treatment of Scabies by Ointment of Pot Carb. and sulphur, otherwise known as Helmerick's ointment. Having seen a Case of this truly loathsome form of Cutaneous disease removed

by the above application. I can bear testimony to its efficacy. Being only applied three times the patient always changing his clothes and bathing in the morning the ointment having been applied the previous night. The diet of the patient must also be attended to. All salt meats must be abandoned and the patient be put upon a light nutritious diet, with proper attention to the bowels &c.

After a few days he will find himself much better, and the disease begining to dis-

appear. This ointment is
Composed of Sulphur Lotum
and Carbonate of Potash in
the proportion of two parts
of Sulphur to one of Carbonate
of Potash with a sufficient
quantity of Lard to form an
Ointment.

1863

An Inaugural Dissertation
on
Diphtheria.
Submitted to the examination
of the
Provost Regents and Faculty of
Physic
of the
University of Maryland
for the
Degree of Doctor of Medicine
by
Augustus Theodore Pike.

Diphtheria. 2.

This term is generally applied to a peculiar, inflammatory disease of the throat, that has for its distinguishing mark and owes its formidable character, chiefly to the formation of a false membrane; it derives its name which was given it by Bretonneau, an eminent French surgeon, who first described and recognised it as a separate disease, from the Greek noun "διφθέρα" a membrane. Angina Pellicularis. & membranaceous are names under which this disease is also known.

It consists essentially of an inflammation taking its origin in the

fauces, during which coarse fibrinous matter, capable of being organized into tissue, is exuded and deposited upon the mucous membrane, beneath the epithelium.

The inflammation, however, as well as the exudation, do not confine themselves to the fauces alone; in fact the tendency of this disease, to spread and affect the mucous membrane of the larynx, renders the prognosis in many cases unfavorable.

Symptoms. The first approach of the disease is marked by the symptoms attendant upon an attack of simple croup.

Redness of the fauces, more or less pain and difficulty in deglutition, with some swelling of the glands to be felt externally, accompanied with more or less fever. If the fauces are inspected a short time after the appearance of these symptoms, small white or grayish looking patches, of irregular shape and more or less in number, may be detected covering the arches of the fauces. If there is great mental excitement present, the surrounding membrane will be highly inflamed, and the tonsils and sub maxillary glands considerably swollen; but if the pulse shows

a typhoid tendency of the disease from the outset, which is frequently the case, there will be more the appearance of venous engorgement.

The rapidity with which the false membrane is formed, varies with the symptoms; a few hours will often suffice to cover the entire fauces, as also the palate and sides of the mouth with it and extension of the disease into the larynx commence.

If this is the case the prognosis is extremely unfavorable; the exudation will descend with great rapidity, often, if the patient survive long enough, into the

trachea and over the bronchia.

But even if we succeed in eradicating and circumscribing the disease, the danger will not yet be over. After the lapse of a few days the membrane will disperate and be replaced by a similar one; this may occur a number of times and assume a chronic form, destroying the patient ultimately, if we cannot give sufficient tone to the system to counteract this tendency.

This disease is accompanied with great difficulty and distress in swallowing, even if the symptoms present be not

violent; the secretion of mucus, which is of an acrid, offensive character and, streaked with blood, is increased, as also the discharges from the nose, if the disease, as it frequently does, should affect the Schneiderian membrane. These discharges are often swallowed and are probably the cause of the irritability of the stomach and diarrhoea, generally present. If the attack is to end favorably, the patches of membrane that are formed again, will gradually become whiter and thinner, the inflammation or congestion

disappear and the secretions again become natural.

Death may take place in this disease in various ways; the patient may die by suffocation, especially in the early and most violent stage of the attack, through obstruction of the air passages by the false tissue; in some cases death seems to be caused by the direct actions of the specific poison, generated in this disease, on the nervous centres; in others the long duration and intractable nature of the malady causes fatal exhaustion.

Frequently we have our patients

it supervening upon other diseases, generally of an asthenic type, in which case there is little chance of a favorable issue.

Diagnosis. With proper care in the examination of the patient, we will meet with no great difficulty in the diagnosis; although there are several diseases, which present some of the symptoms and appearances of an attack of Diphtheria, as the following:

Angina Simplex, pseudo-membranous croup, aphthous inflammation, scarlatina, if it affect the throat alone, ulcers and gangrene of the throat from various

causes.

For common Angina it can only be mistaken through neglect; the physician omitting to inspect the parts, being satisfied with the statement of the patient and the general symptoms.

In pseudo-membranous croup there is generally no great disturbance of the system until near its fatal close; the exudation commences in the larynx. In diphtheria, on the contrary, the pulse indicates more or less derangement of the system from the outset, and the exudations, as already remarked, appear first in the fauces.

Aphthae appear at first in white points on the mucous membrane, coalesce at a later period, and may be detached without causing blood to flow; while the false membrane in diphtheria appears in patches, which are not easily detached without the extravasation of some blood.

If we subject aphthae to a microscopical examination, we will perceive them to consist of a peculiar parasitic growth.

The product of diphtheritic inflammation examined in like manner, will be found to possess the structure and constituents of membrane.

The eruption in Scarlatina shows itself at first in points similar to aphthae, is not closely adherent to the membrane and evinces no tendency to descend into the larynx.

The patches of false membrane may be readily distinguished from ulcers and sloughs, by the unbroken state of the mucous membrane, on which they appear; ulceration often takes place beneath them, they are thrown off and an ulcerated surface exposed, which however is soon occupied again by the reformation of the false tissue.

If the physician once has had

the opportunity to see and examine the true diphtheritic exudations he will always after recognise it with facility.

Causes. The exciting causes of this disease are the same which may give rise to an attack of common angina; what the predisposing circumstance is not clear, though it is supposed, that it is a disease of the blood, from the fact, that the exudations in persons afflicted with this malady, is inclined to appear, on excoriated surfaces in other parts of the body.

This disease occurs frequently as an epidemic, appearing in one place and committing dreadful ravages, while even the immediate neighbourhood is perfectly exempt from it. Or it will attack a single family without extending any further.

This has given rise to the opinion entertained by some medical writers, that it is not really contagious, but that there exists a predisposition to it in some individuals, but this question is not as yet satisfactorily solved.

All ages are attacked by this

malady; but among children it will often rage as an epidemic, without affecting adults.

Treatment. The treatment depends very much on the character of the attack, the constitution of the patient, and the circumstances and surrounding influences, under which it makes its appearance; for instance, when it occurs epidemically, it attacks persons of sound constitution, is ushered in by violent inflammatory symptoms, which seem to demand decided antiphlogistic treatment; and

still we are taught by experience that, especially in these cases depletions can only be moderately and cautiously employed, because though in mind the symptoms may be at the outset, it will soon become necessary to support the system instead of depressing it.

In a case occurring sporadically in a person of good constitution, if there is great arterial excitement present, it will be appropriate to use moderate depleting measures. A moderate dose of some saline cathartic will

act sufficiently as a laxative and remove offending matter, which would increase the irritation from the bowels.

It will hardly be warranted in any case to make use of general bleeding and antimonials.

Remedies acting mildly on the skin and kidneys will be found sufficient to control the fever.

But if our patient be of sickly constitution, anaemic, having the channels dilated or debilitated by previous attacks of disease, the chief indication will be to stimulate

and give tone to the system.
Nutritious food, but of such
character as not to derange the
digestive apparatus, especially
beef tea and animal broths;
tea, coffee and stimulants,
Quinine, Carbonate of Ammonia
and above all the preparations
of Iron, will be appropriate.
Alcoholic stimulants, in this
disease will generally be contra-
indicated, because they are
liable to augment the local
irritation; but in the form
of milk punch or the Malaga
Wine Whey of the Pharma-
copeia, especially in cases

marked by great depression of the vital powers, they will often be of great service.

Chlorate of Potassa has acquired a great reputation in this disease, given internally in doses of 15 – 20 grains three or four times a day. The mode of action of this remedy has been explained variously; some maintaining that in diphtheria the function of oxygenation of the blood is imperfectly performed and that Chlorate of Potassa acts by supplying the deficiency of oxygen.

Bromine and Bromide of

Potassium have also been recommended in this disease.

The local treatment is of great importance in every case; many topical applications have been tried, with real or fancied good results, and been commented on by medical writers.

In mild and tractable cases a gargle of Alum, Sulphate of Zinc or Chlorate of Potassa has been found very useful; in those in which a tendency to gangrene exists, solutions of Chlorinated Soda are of good service.

Caustics, by destroying the plastic

effusion and substituting healthy for diseased action, have been found to be, in many cases, essential to the treatment; still in many others they are unavailing and even pernicious. One of the most useful remedies of this class is Hydro-Chloric acid, applied, if it seems necessary undiluted. The muriated tincture of Iron, by its astringent and tonic properties, has acquired a well-merited reputation as a local application.

If the disease should have affected the larynx, we must

apply our remedies to it, which may be done, without any great difficulty, during a full inspiration of the patient, when by depressing the tongue, the part may be reached with a probang, saturated with the solution we intend to use.

It becomes necessary sometimes to perform the operation of laryngotomy or tracheotomy; though this will not always save the patient, yet it will prolong life, which it is our duty to do in every instance.

The cases which I have had the opportunity of observing

in the military hospital where I am stationed at present, occurred almost invariably in patients, of strumous habit and in those enfeebled by the hardships of a long campaign.

The treatment, which was found to be the most successful in these cases, consisted in the administration of Chlorate of Potassa in large doses, with Tincture of Iron, Quinine and a liberal allowance of beef tea and milk.

As a local remedy, Tincture of Iron applied by means of a camel's hair pencil four or

five times a day, one vessel, with a gargle, of Chlorate of Potash, about fifteen grains to the ounce of water, and a few drops of Nitric or Muriatic acid.

1863

An
Inaugural Dissertation
on
Pneumonia
Submitted to the Examination
of the
Provost Regent
and
Faculty of Physic
of the
University of Maryland
for
the Degree of
Doctor in Medicine
by,
James H. H. Warfield

Pneumonia;

At first I shall endeavour to describe the disease as it exists, and how it's effects the human body; Secondly the different Stages & by which it is known; Thirdly the Symptoms & how long the disorder exists what are its Signs for its favourable or unfavourable Termination.

1st What is Pneumonia; it is an inflamation of the Parenchyma or Substance of the lungs; and has three well-marked Stages, of which I will speak after a while; There has been difference of opinion in Regard to the precise portion

of the lung in which the inflamation
begins, though these are questions
of no great moment as we have
the best authority for believing
that all the textures composing
the pulmonary substance in the
part inflamed, are more or less
involved in the inflamatory process.
In Pneumonia, it is true we have
to trace every step by means of the
ear; and all the symptoms which
give us information respecting
the increase or abatement of the
disease springs out of the substance
of the lungs; and these are
unfolded to us by means of auscul-
tation; we should therefore

understand all those changes which are produced by inflamation of the lungs; I will now take into consideration the three condition's of the lungs or as they are generally called the three Stages of the disease;
1st is that of engorgement in which the lung presents a reddened appearence more dense than usual with some effusion but no consolidation, air still penetrates, it floats on water and crepitates on pressure there also exudes a frothy serum when it is pressed;
2nd is that of hepatization which has still greater congestion and effusion into the smaller bronchial

tubes; the effusion is either bloody or fibrine and when you cut the lung it is consolidated & sinks in water, neither does it crepitate when pressed but exudes a bloody serum; 3rd is that of suppuration called gray hepatization or purulent infiltration this differs from the second by presenting a grayish yellow appearance also a solid & smooth one and the effused matter is converted into pus. Portions of the same lung may be in the second and third stage at the same time, and if the suppuration be circumscribed it constitutes a pulmonary abscess but this is not to be regarded as a very

dangerous sign, as extensive
suppuration would destroy life
before an abscess could be formed;
Pneumonia, may be either single
or double, that is it may attact but one
or booth lungs at the same time.
And. In the same lung it may be
general or partial, attact the upper
or lower lobe it may also attact
the base centre or Root;
Pneumonia is sometimes connected
with Bronchitis this form of the disease
is for the most part met with in
cases where the disease prevails
among Children, and in depraved
constitutions. Gangrene is often
the result, it has a peculiar

tendency, to some persons and sometimes it may be diffused and at others it may be in. Isolated spots we will next take into consideration the importance of the disease in regard to the;

Symptoms: at the commencement there is a decided chill followed by fever & pain more or less violent in the side breast or back & it generally accompanies the fever or is noticed some after, when it is complicated with pleurisy the pain is acute but when not complicated with that disorder it is the true lung pain rather dull that they experience in the region of the nipple on the one

Or the other side, however it is some-
times referred to the epigastrium;
Respiration is quickened, cough
dry. Pulse feeble but hurried as in
low Typhoid cases, the expectoration
generally bloody, the Sputa is of a
Rusty Colour viscid & tough, not
very copious the rusty Colour is
caused by the uniform Mixture
with blood; but when the disorder
is complicated with bronchitis the
Sputa is nearly streaked with blood
The patient can not lay on his side
but a very short time on account
of the fluid which accumulates
in the chest, the pain is often
increased by deep inspiration

also by coughing though it lasts
but a short time, Headache is a
very common Symptom arising
from a deficient aeriation of the
blood in the brain, the flush on
the face is often dark, confined
to one cheek according to some
observers on the same side as the
disease; However we must not
depend upon the above named
Symptoms in all cases, as we
have them very much masked
in many instances we should
therefore Resort to the means
of Auscultation, for I think there
is no other phenomena by which
we can so exactly determine the

Nature of any Disease of the lungs
we will also have to acknowledge
that it is admitted by the best
authority to be the only true guide
by which we can ascertain
the condition of the Lungs next
we notice is the;
Physical Signs: In the first stage
slight dulness can be perceived
on percussion, also diminished
Respiratory Murmer is audible;
Short after this however crepitant
Rhonchus may be perceived especially
if there be Rusty Sputa; It is sometimes
heard only when the patient takes a
deep breath, but as a general rule
it is audible at all times;

Crepitant Rhonchus, is caused by the seperation of the adherent walls of the chest in inspiration & expiration, it resembles that of rubbing a lock of hair between the fingers close to the ear; This sound indicates engorgement and while it remains it shows the inflamation has not passed further than the first stage, also while we can distinguish the respirator murmur over the Crepitant Rhonchus, we should infer that the inflammation is but slight; though when the crepitation is loud enough to be heard over the respiratory murmur it is proof that the disease is making progress towards the second stage.

However these Symptoms soon change either by the determination of the disease to progress further or by its resolution to abate, though in the latter case the crepitation diminishes both in extent and intensity respiration is more natural, and the sound of the chest becomes less dull upon percussion, and its movements much more regular; but in the former case, the symptoms are very different crepitation is increased respiration excited the sound of the chest becomes duller and its movements very irregular ÷

We come now to consider the Second stage or that of hepatization

In this Condition, there is greater dulness on percussion, we have also bronchial respiration and bronchophony produced; and these signs gives us an accurate account of the extent and intensity of the disease, for when we have bronchial respiration we may be certain that Pneumonia, has passed the first stage, as it is an undoubted symptom of the inflammation passing into the second stage, again we may hear crepitant-rhonchus in the adjacent parts of the chest and if the patient should recover from the second stage and the effusion be diminished so the air may be

admitted into the smaller tubes & vessels it is perceived at once by the return of small crepitation which is considered as favourable for its termination: while on the other hand if he does not recover from the second stage, the effusion does not so diminish that we may hear the small crepitation but increases as the disorder progresses to the third stage, then we will have to trust to the strength of the constitution and the amount of tissue involved in the inflammation third stage: The symptoms of this somewhat resembles those of the second stage except that the

Lungs become effused with pus instead of blood; the pus at first is consistent but soon becomes liquefied and while the lung is in this condition we may distinguish a peculiar crepitation, at first only in some parts of the affected surface, & after-wards in the whole of the part inflamed; this is generally announced by a chill togather with the expectoration of a prune juice sputum:

Convalescence; commences about the end of the first or begining of the second week if the disease has not passed into the second stage but if it has recovery will

not begin until about the end of the second or commencement of the third week and if the disease has still passed on beyond the second stage convalescence will depends intirely on the strength of the patients constitution as I have mentioned before, also to some extent on the amount of tissue involved in the inflammation Again convalescence does not begin until after an abscess has been formed in the lung, However this is very seldome and it is characterized by a gurgling sound or a cavernous rhonchus; which is produced by the passage of air through the liquid

formed in the abscess, and when
the cavity has been opened & emptied
of its contence by expectoration, we
hear pectoriloquy, also cavernous
Respiration may be observed we also
have Pneumonia terminating in
another form that of gangrene
However this is as seldom perhaps
as the forming of an abscess;
we must mention some signs
by which we can tell this form
of the disease before going further
and one of the best is that of a
fœtid breath; the matter expectorated
is also very fœtid; these are accompa-
nied with great prostration of the
patient, the rusty sputa is another

valuable sign when the inflammation is confined in the middle of the lung, and it should be always carefully noticed.

Treatment:-

This should consist of the plainest possible means of arresting the symptoms as they present themselves and should not be confined to the mere treatment of Pneumonia alone, but the symptoms should be carefully watched to ascertain if there existing any other disease to retard its motion and if there be any it should be arrested as soon as possible, or otherwise

It might prove fatal to the patient having a complication of diseases and treating the one only, therefore I would try and treat all the symptoms as they arise, and when the disease is in the first stage and the constitution strong I should imploy the means of free bleeding as I think it is the proper means for arresting the disorder and it may be deamed proper to repeat it if at first we do not arrest the inflammation, but if this be delayed until a later period or until bronchial respiration occurs it will be of but little importance

Then we should resort to other means
for arresting the disorder; However
bleeding may be of much importance
in the beginning of the second
stage in some cases, though it
should be employed only in strong
constitutions; It should then
be followed by a brisk purge
after this the lapatives & antimonial
treatment should be commenced
beginning at first with from 1/6 to
1/5 of a grain of tartar emetic, every
two hours; If the skin be hot & dry
refrigerant diaphoretics should be
employed & after a few days of this
treatment a full dose of dovers
powder with two or three grains of

Calomel should be given at night;
In the second stage - general bleeding
should be very carefully employed
cups and blisters however may be
freely used, and the Mercurial
treatment commenced with as
soon as possible, Calomel and
dovers powder should be given
every few hours until salivation
is accomplished, after which
stimulant & expectorants may be
employed, seneka with ipecacu-
anha or tartar emetic and opium;
And in gangrenous Pneumonia
the stimulant & supporting plan
is proper such as quinia carbonate
of ammonia wine or brandy togather

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anha or tartar emetic and opium;
And in gangrenous Pneumonia
the Stimulant & supporting plan
is proper such as quinia Carbonate
of amonia wine or brandy together

with creasote, chloride of lime, and some of the mineral acids,

In bilious Pneumonia, the only modification in the treatment is to commence with the mercurials immediately after bleeding;

In the miasmatic form quinea should be imployed; And in Typhus general depletion is advised, by means of cupping, and blistering also with the early use of mercury combined with opium, and ipecac with carbonate of amonia & wine,

The chronic form is to be treated with a moderat topical depletion, as blisters & and a mild course of mercury.

1863

Inaugural Dissertation

on

"Prognosis"

Submitted to the examination

of the

Provost Regents

and

Faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

by

Alfred C. Nixon

"Prognosis"

Under this word we may well say all things relating to medicine are included.

Pathology, the first of all is the foundation upon which all are based, and upon which we must rely.

This being the forerunner, we must find out the meaning of pathology whose meaning is diseased physiology. The meaning of physiology, is the science of life, the due performance of the many organs which constitute the animal or vegetable frame, and whose pathology is formed in the disease of one of those vital parts thus in the vegetable anatomy if we see the stalk withered and the leaves drooping and scorched we then have the prognosis of its pathology and from such symptoms we know its functions are partly destroyed.

This is the commencement of its disease, and the foundation upon which we must find our diagnosis

Well some such symptoms we might have a scalded plant, and would readily pronounce it incurable or making it a matter of study we might say it is a disease of the root and thus deem it necessary to stir the soil around it pour about it some water which might act as a good remedy for its nourishment or it might be advantageous to take it up and plant it again in stronger soil, or it might be necessary to search it root and remove some gnawing worm which might cause its drooping, like the stabbing pain of pleurisy would do in a short time on its victim

In considering pleurisy, and in making a comparison between it and a diseased plant I must look to its prognosis for its foundation the base upon which it is unmistakable; such grounds are only to be found by its symptoms, and as the

Plaintiff must receive its due attention or be lost.

The principal symptoms are fever, pain in the side which is usually acute, pungent, and stabbing as if a sharp instrument were driven to the side whenever the patient inspires: hard and frequent pulse dry cough, flushed face. We now have the prognosis the symptoms and general signs to discriminate the disease to be pleurisy. Pleurisy is an inflamation of the serous membranes which lines the cavity of the chest and invests the contained organs of ~~generation~~ inspiration it may be acute or chronic it also varies in its position it may affect one or both sides of the chest, it may be general involving the whole of one side or partial, one part of one side; it may be simple or complicated; the complications may be either accidental or essential and in the latter case, the pleurisy and its complication stand to each other in the relation of effect and

cause. The cause of Pleurisy; this is something which cannot be laid to any one thing or cause; it may [illegible] from cold or exposure to severe weather; or it may be caused by a severe blow or fall; I knew of a case in which the disease was believed to be produced by a fall, this patient was seized with the symptoms of Pleurisy lived twenty days and died, with all that his physician could do. This patient was a young man of about twenty five years of age in the vigor and strength of manhood, looking forwards to a long life and great joy and speculation; but alas did he not meet with an early grave was he not plucked as a rose from its bush and cast aside to be forgotten by those whom he once knew. But did not this man while in health bid fare to to live as long as you or me and to our great surprise cut down by an unexpected blow.

When a disease is of sufficient standing and rage

it may be shaken with all the medicines and medical skill that the world can sum up it is impossible to break its course it will lead its victim to the shaddow of death a dismal place to those who are unprepared and who seek no haven nor never think of the change betwen life and death.

The physician should remember this change as well as those who know not the science of medicine a physician should remember that he is the most likely to wind this life out as in them those in a more quiet life, because when he is riding through storm and snow in the night breaking his constitution, the unprofessional man is taking his ease or rest or perhaps is asleep that he may be refreshed by the time of his morning duty.

But we must all die, and not only us but all that liveth, yes the mighty trees of the forest

for instance let us turn our attention to something more gigantic than man let us choose a grand old oak tree for many a season has it borne its acorns and generation after generation has there found shade and repose from the sun when in his hottest rays of heat, and years after years and centuries after centuries have passed have passed away while the noble old oak yet stands, and yet it stands in our days as if to stand always, I call upon you to view the grand old tree how noble it stands as if in defiance of storm or ague, how high its top its top above the ground as if to shade all creatures around.

It stands it bows in the storm like the mighty ocean in its angry rage.

But ala what do we see and hear of the grand old tree, it is at last guided by disease like the

sea beneath a calm.

What disease hath preyed upon such a monster and has shaken him so as to shake him even to the core, we see its symptoms we see it rapidly declining, new branches spring out from its trunk, new twigs from its larger limbs but they wither and die for the want of nourishment.

What do we see in the next view of the grand old tree we see some of its greater members giving way and becoming useless. Now we wish to know what is the disease so rapidly prevailing upon its system, we will look its symptoms and diagnosticate its disease.

From its symptoms we diagnosticate its disease dolaje and incurable, but there may be one standing higher in medical science than I that may not agree with me in the diagnosis of this disease.

But I think disease in the meridian year of

his age, we all know and must agree that are similar relation between the two.

What do we see in an old man's face when his appearance, his eyebrows, his eyes, his lips; do we not discover them to be shrinking or failing in their former strength, we see the skin loose about them and wanting round, the nails change in their elasticity and become brittle, the blood settles under them or ceases to circulate about them they fade in color and as the tips of the lips become weak and easily damaged.

Again let us watch him for a few months longer and what will be the change his skin will turn white as the leaves in autumn turn brown from the effects of several nights of frost. His footsteps once fearless and bold, now trouble with weakness and fear, like the grand old tree must shortly lie upon the ground, on which it so proudly stood, not in any unchangeable

position does it lie, no more until it has changed to it's mother dust; from which it was composed. Thus may we exclaim O! death of what disease will thou take me away, O! earth which portion of thee shall hold my remains!

As we see the laws of nature must be kept up we then take another consideration that is to under the laws of nature as nothing is lost nor gained; this law must be kept up decomposition and composition of old and new matter, or forming new matter of old substances.

We must then submit to decomposition as others before us have done; this is to said there are nothing more or less than was first created; Not a particle more nor less not a drop of water has been added to the enormous quantities of the Oceans or rivers, lakes and ponds, no not even the hundredth part of a drop has been evaporated from the enormous quantities that come under our observation.

Not even the first grain of sand out of the large quantity that exists on the sea shore has ever been washed away or ground so fine as to enable us to say that it exists no more nor it never will be missed in quantity upon its native soil it is as sands that is unchangeable in itself.

Thus of all other things that ever existed, or exist in other forms & in different substances and in the course of time must exist in something different to what it now exists in.

Therefore these very bodys of ours once existed in something different to what they now exist in. Perhaps we once existed in particles of matter that formed some mans old cow, or in particles of matter that may have formed some Lady's Lap dog or pet lamb, or in some gay, Peacock or in a closer view in particles of matter that formed some handsome Lad, who knows, I imagines we did as there is changing in all things Yes in the matter of some

handsome Lady, that was dear to some mans mind.
As there is changes in all things, perhaps we will exist in the
growth of some lofty tree or in the strength of some great
giant that is to come. In memory to this Lots wife once
was a woman as other women but now exist in a pillar of
salt. As we see and know that all things change, who
knows but that some of us shall exist in the form of
some lofty rock upon which many a storm shall
blow and upon which many a drop of rain hail and snow
shall beat, shall we imagine this a grievous position
no, it is no more so than to imagine ourselves buried in the
bowels of the earth to remains for years and centuries
and periods unknown; but as we must agree to the fact
of decomposition or change in some other form and
that our time for the change must come either sooner
or later we should then prepare ourselves with the necessa
ry duties and be up and ready with our lamps trimed and

burning that we may not be taken by surprise like the five foolish virgins.

We know of diseases that cometh in a lurking or stealing way like a thief in the night when no man is aware of his approach. This is the manner that many of our diseases prevail, yes with a fair and beautiful face but with the breath of death in its perspiration, Oh! do you Phthisis pulmonalis how gradually dost thou steal upon the system and acts a thief in the night robs the possessor of all that he has. You come with a beautiful face giving color to the cheeks and anxiety to the eyes with those brilliant looks you steal away the victim gradually step by step until he is beyond recovery then thou turnest thy down upon him a haggard look, a drowsy wearied appearance as if worn out by toil & long life. and severe exercise you thou hast led him to the valley of death.

Again I will bring to mind another disease which is to be dreaded in whose case I may not do justice, there is a

case or disease unknown by its symptoms. Tinsman was of full habit his symptoms prevailed in the spinal column about the twelfth dorsal vertebra it was a dull gnawing pain or boring upon the spine producing uneasiness of that part this went on for years without disabling him but gradually grew worse until it gave him great uneasiness and distress his only ease was to keep the parts highly steamed or heated by sitting with his back to a large fire he underwent the steam bath operations but it availed nothing as soon as the heat was removed the pain returned as usual he made an attempt to return to his place of business and on leaving the house & shutting the door he was seen to turn quickly around and open the door and fall in and in which instant soon breathed his last. Now physicians are called; his disease is yet unknown, post mortem examinations are proposed and held, the cause of his is found and it terminates in a bursted aneurism

found upon the Aorta: this aneurism had grown to the size of an orange and had worked upon the vertebras until it was considered by some perhaps quite half through.

Aneurism may occur on any artery in the body and terminate fatal in the most of them an aneurism is a pulsating tumor or sac formed in the coats of the artery or dilating the coats projecting above its common level and filled with fluid blood. The treatment of aneurism is by tieing the artery; there are three modes of this practice given by surgeons in ancient times and some of those modes of practice are yet in use.

Hunter and that of Brasdon and of Hardrop was the principle in those days as they were the most eminent surgeons of that date. The Hunterian operation consists in tieing the artery on the cardiac side of the tumor and at some distance from it. Brasdon's operation consists in tieing the trunks of the artery on the distal side of the

aneurism and in its near proximity.

Wardrop's operation consists in tying on the two terminating branches of the artery on each side of the aneurism. Brasdor says his operation is preferable to the Scarpian because it is practicable where the Scarpian operation is not. Also Desault recommends Brasdor's mode, but neither of those two Surgeons performed it.

The first trial was given it by Deschamps but unsuccessfully: Sir Astley Cooper was the next follower of this mode but with similar success. These are the only two instances in which during a period of forty years or more that Brasdors was performed and that unsuccessfully; this that operation went out of use since for a time but was revived by Wardrop in the year 1825 then it was practiced by other Surgeons. Aneurism may be treated by pressure and it appears as if those modes of operation has been in operation for a considerable length of time but in as it disadvantages

as well as its advantages. Its mode is by bandageing and pads immediately on the tumor. also local treatment was employed at the same time such as general bloodletting rest and spare diet. But laying aside all those treatments and come up to the present day I would not deem it necessary to establish any one mode of treatment but should meet the disease according to my own judgement, thus if there was an aneurism on the brachial artery I should consider it as applicable to tie the artery above and below and then remove that portion of the artery contained between the two ligatures and then heal the parts as it would be applicable in healing any other simple incision. But with all that can be done this pulsating sac will sometimes burst and death is the result instantly. Now let us drop this disease and take up another that is equally as fatal sooner or later one in which its termination must come and that as sudden as the bursting

of an aneurism. It is my opinion that those two diseases run parallel with each other, though there may be a difference in their favourable and fatal terminations. The symptoms of this disease being so complex it is rather a difficult matter to state them correctly but not being allowed the privilege of reference I must state them to the best of ability from a wild and floating memory. If we see a person come quickly out the dark into a strong light with large dilated pupils and they do not contract readily we mark that as a true symptom of something being wrong about the centre of nervous system and more especially if the person be in a rage with unpleasant countenance and the pupils do not contract at all we may expect something serious or a termination in death in a short time. Again we will take a man that is seized with a fit of severe coughing and who soon sinks into a state syncope with feeble pulse and loss of sensation, we may find

his sight, hearing, taste, smell and touch are injured he lies in a state of insensibility and is unconscious of everything passing around him. here it appears as if the brain was greatly disturbed those symptoms may soon terminate in death or a reaction may take place in a short time and the patient recover but generally if there is nothing done for such a person he will be apt to leave this world of beauty and pleasure. Although one or two of such attacks may pass over and the patient recover he is by no means clear of the disease for at an instant symptoms of the same disease may rise him and thoughtless to him may hurl him from time to eternity thus we should all be ready and [illegible] and [illegible] prepared so that the mighty dash should only throw us to a world of greater pleasures These are the symptoms of Apoplexy, they are brought on by various causes sometimes by muscular exercise and again

by heat and by study having the mind bent forcibly on some object or business as contending in law matters at the bar for instance there was a case of law removed from one state to another for a trial, and in which case being imminent lawyers employed on both sides, the lawyer employed on the defendant and to whom the case was carried to, in making great preparations to meet his opponent he overcharged his mind and in deep study or making great effort he was seized with apoplectic seizure and never recovered. The first symptoms of this case was a senseless condition of the hand in the morning when he attempted to wash in placing or dipping his hands in water he discovered that one hand was senseless to the shock which was produced on the other hand it felt as if it had not touched the water. Thus the disease continued to prevail as he exercised his mind and on the attempt to speak he struggled and fell or would have fallen

if not prevented. Thus here was a sensative symptom of apoplexy given in the senseless position of the hand and it being neglected, death was the result. This disease may be produced by various causes; Dr. Armstrong relates a case produced by cold, he says a lady who consulted him was chilled on going out one day in the winter she was pale her skin was cold and she complained of obscure pain in the head. After being in this state for two or three days she had an attack of apoplexy which terminated fatally. Hence we find this disease may originate from various causes, from heat, cold and muscular exercise and close application in various studies it is also produced by drinking. I knew of man who was apoplectically inclined and he had been attached twice by the disease and yet he continued to drink, he was cautioned by both his physician and by symptoms of disease and he would, not heed, like other habituated drunkards

with no danger but he was siezed by the third attack while about two-thirds home, from which he never recovered he died on the road, an unexpected death to his family, now we know strong drink caused the disease, he was cautioned but would not be convinced of the approaching danger, this is the way in which drunkards lead their way to an early grave, we may view the world over and over and we will find them cast and doomed to this woe way when we view a drunkards path to woe not behold a path painted black with hellish victims and dark clouds of woe, also do not the scriptures say the drunkard shall find his portion in a lake of fire and brimstone where the worm dieth not and the fire is not quenched.

A. C. Nixon

1863

An Inaugural Dissertation.

on

Typhoid Fever

Submitted to the examination

of the

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Faculty of Physic

of the

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For the Degree of

Doctor of Medicine

By

Julius Ellicott Gerry

of

Maryland.

Typhoid Fever.

There is no disease perhaps to which the Physician is called of more importance than Typhoid Fever. important because of its frequent occurence and so generally attended by very various symptoms. As to the history of the disease it has long ben known as a fever of frequent occurence not only Common to this Country but also the Continent. For the first Satisfactory account of the Character, symptoms and various complications we are indebted to the Physicians of Europe. Prof. Stokes was the first who published a work upon the Pathological lesions in 1804. Since which time it has been the study of many able minds of both Countries. I shall not attempt in the space which I propose occupying to recapitulate the various opinions of the writers upon this subject but to its Minute but ——

shall be content if I present those features which I have been taught to consider most important. In order to do so I shall first state the causes which are supposed to give rise to the disease, then the diagnosis or means by which we distinguish it from the kindred affection Typhus, Third the prognosis and fourth the treatment. By the causes I mean those circumstances and conditions which combine to favour the disease or its production.

Of these the most important are age, locality and Contagion. Age is supposed to exert great influence in the advent of the disease, or in other words the fever is of much more frequent occurence among the young and middle aged than the old.

It is probable that a majority of cases occur during the seven Years between Eighteen and twenty five, and that it is not often seen after the

foetidis, and that few cases are recorded in which it has occured after the age of fifty. Of one hundred and seventeen cases mentioned by Chomel, ninety one were between the age of Eighteen and thirty. These and many other statistical reports made by Louis, Dr. Jenner and others would certainly prove what has been before stated that it is a fever confined to the young and middle aged. This may be accounted for by the fact that the Young as a general rule by their active pursuits are more exposed to the exciting causes such as exposure to cold, damp &c. &c. As to locality the same rule which applies to other diseases holds good in this. Persons living in our crowded cities, breathing the bad air, and inhaling the Malaria arising from the docks, and other malignant sources are certainly more liable to the disease, particularly if raging

as an epidemic than those who reside in the Country and have the benifit of its pure and invigorating atmosphere. In regard to the propagation of this disease from one person to an other much has been said and various opinions expressed, and yet I belive is an undecided point.

It would occupy too much time to enter into the various opinions of the different learned men who have discussed this subject although it is one of importance, and opens a wide field for investigation and Scientific Research.

Typhoid Fever is not only an Epidemic disease but seems to have a migratory tendency, Appearing in a particular locality suddenly raging violently and then disappearing, scarcely a case occuring afterwards to bring to mind its former presence.

Having thus glanced at some of the exciting causes I shall now proceed to the diagnosis.

The symptoms are often obscure but in most instances present some prominent feature by which it can be distinguished. The disease often begins abruptly, the only prominent sign being a slight rigor or chill, followed immediately by all the symptoms of fever, which may be acute for a short time and then assume the low febrile condition so characteristic of this disease. In the country, however, the onset is generally gradual and not marked by any prominent event, but is insidious in its course so much so that the patient is often unable to tell You at what time he was taken sick, saying perhaps that at some previous time he felt a sensation of uneasiness pains in his limbs, headach, and a feeling of general debility which compels him to take to his bed. After this if You find the skin

becomes hot, the pulse accelerated, the appetite
diminished, the tongue coated, with a whitish
fur, a cessation of the chilly sensations, Epis-
taxis, and perhaps diarrhoea, You may be
assured that the disease is fairly under way.
The patient may continue in this condition
until about the seventh day when there will be
a marked change in all the symptoms, to which
others may be added of a more serious nature.
The abdomen becomes distented and tympanitic,
the tongue becomes dry and dark, there is a singing
or buzzing in the ears, and if an examination
be made of the abdomen we will discover the peculiar
and almost Constant Rose coloured eruption
common to this fever alone. If the disease pro-
ceeds to an unfavourable termination we have
still more alarming symptoms, the patient lies
on his back with a constant tendency to slip

towards the foot of the bed; the headache is followed by delirium generally of a low form. He mutters incomplete sentences, sizes at imaginary objects, or perhaps attempts to rise from his bed and falls back exhausted.

The tongue becomes dark and dry, parched and furrowed, great difficulty of deglutition and inability to protrude the tongue. The skin loses its vitality and presents a strong tendency to sloughing particularly of blistered surfaces. Bed sores appear upon parts most exposed to pressure. Finally the pulse gives way, becomes exceedingly weak frequent and fluttering, the extremities become cold, and the surface of the body is covered with a cold clammy sweat. The countenance assumes the Hippocratic aspect and death quickly supervenes.

I have thus briefly noticed the symptoms

which present themselves in the onset of the disease and the changes which take place making the course of the disease to a fatal termination. I shall now take the opposite view and notice the great alleviation of all the symptoms which are so cheering as to speak of returning health and vigor.

The signs which characterize the change are many. We have a gradual attention of all the symptoms, the tongue becomes moist and begins to throw off its coating beginning at the tip and edges. The pulse is less frequent, more firm and full.

The skin becomes moist and cooler, gradually relaxing, and the morbid symptoms disappear. One of the most happy signs of improvement is that the patient begins to give anxious thought about himself & friends, inquiring at what time

he may be permitted to leave his bed, &c. &c.

An increase in the appetite or at least an inclination to take food is very favourable. Because I know of no disease during the active stage in which the patient exhibits so constant an aversion to food. I mentioned above that "the tongue was gradually relieved of its coating beginning at the tip and edges."

This manner of getting rid of the fur is not by any means constant for in protracted and severe cases particularly when there has been severe intestinal lesions the exudation begins from the centre or base and is removed in flakes leaving the surface beneath smooth, and shining which may again become coated and relieved in the same manner unless it becomes dry which is an unfavourable symptom as it indicates an increase of intestinal trouble;

and a protracted continuance of the disease.

I have thus in not a very concise manner mentioned most of the symptoms which mark the course of this disease, but as some of them are important as diagnostic signs and prognostic indications I shall give them a more minute description. The rose coloured or lenticular Eruption is the most consistent and characteristic phenomena of this disease, so much so that it has been called by many the Typhous Eruption. It consists of a spot slightly elevated above the surface, sensible to the touch but disappearing upon pressure, returning immediately the pressure being removed and assuming its former bright red or rose colour. They are generally found upon the abdomen and back, sometimes upon the extremities appearing about the eight day but sometimes as late as the fifteenth day of the disease. It is important to distinguish this Eruption

from another of different character which sometimes
appears in this disease but more common in Typhus
and other Febrile diseases. I refer to a transparent
oval vesicle caused by the exudation of Serum
beneath the surface, which generally are first noticed
in the axilla and upper part of the chest.
The difference in the appearance of this Eruption
is so striking that You would not be likely to con-
found it with the Eruption of Typhoid. The
former (Sudamina) is rarely seen before the fourteenth
day while the latter appears as early as the eight.
The Sudamina remains about six days, and then
gradually disappear while the Rose coloured
Spots are removed every two or three days.
Another important and constant attendant of
Typhoid is diarhoea dependant upon inflam-
mation of the mucus membrane of the intestines.
occuring generally the first day of the fever.

Sometimes later when it is regarded as an unfavourable symptom. The number of stools in twenty-four hours vary in different cases, sometimes only one or two, at others as many as twenty.

The appearance of the diarhoea of Typhoid is peculiar to this disease alone being generally of a perfectly natural colour but altered in consistence. Whenever You have this condition of the bowels there will always be some pain in the bowels and abdomen, but not usually of sufficient severity to produce much uneasiness. Many symptoms are Common to Typhoid and Typhus fever, yet a proper Knowledge of the diseases will enable you to distinguish them. Among the most important of these is the history of the Case. If the patient be old, and You find that he has been aboard Ship where many have been crowded together, or if he has been confined in an unventilated

attainment you have good reason to suspect the disease to be Typhus. Again Diarrhoea the almost constant attendant of Enteric Fever is rarely if ever seen in Typhus, and if present at all is of a different character.

The eruption of Typhus appears earlier and is less regular as to the parts upon which it is seen being generally spread over the whole body. Again the inflammation of Peyers Patches and the Mesentary glands so common in Typhoid are never seen in Typhus.

There are cases however which may present prominent features of both which is accounted for by the fact that they may exist conjointly.

I might go on enumerating the symptoms which present themselves in the course of this disease but will not, as it would occupy too much time.

Having then noticed the principal Diagnostic Signs by which its true character in most Cases may be recognised, I shall now in as short a space as possible notice the Prognosis, and close with the treatment.

Typhoid Fever at least is a dangerous disease, accompanied as it often is by lesions of the most dangerous nature. It is to these we must look for indications of a happy or fatal termination. The age of the patient, his former habits, the character of the Epidemic raging at the time he took the disease. The increase or decline of the Symptoms during the first few days of the fever, all should be taken into consideration before we conclude as to what will be the result. The mortality of Typhoid depends in a great measure upon the character of the

Epidemic whether it be of mild or severe type, because it has been shown that it assumes very different degrees of severity at different times. During some Epidemics all the cases will be of mild form, passing through its ordinary course without being accompanied by those alarming symptoms which in many instances are so dangerous. The fever is much more fatal in Hospital Patients than in private residences. Again declination, age, and season all have their influence, and it is the due consideration of all these facts which must govern us in making our Prognosis. The mortality of deaths in this Country are less than in Europe. In regard to the treatment there has been the greatest difference of opinion. Some advocate a sort of Routine. While

Thus are content if they can alleviate the symptoms as they present themselves.

This is the plan I shall adopt in taking it for granted that I am not expected to present any thing new or original. I do not hesitate to express the views of our worthy Professor. In the beginning of the disease as there is in most instances a tendency to fever it will be our business to avoid giving those remedies which would tend to irritate. Therefore for the purpose of evacuating the bowels we give a dose of Castor oil adding fifteen or 20 drops of Laud. This if time be given after the bowels have been moved if time be given while symptoms we may resort to blood letting by the lancet, but this is rarely admissible and never should be employed except in the earliest stages of the disease.

The great objection to blood letting being the strong tendency the liver has to run its ordinary course, Consiquently the system requires all its vigor to resist its long continued attack.

Local bleeding is to be resorted to when we have active epitement occuring in any particular part. If it be of the head leaches may be applied to the temples and back of the neck, if of the abdomen cupping will often be attended by very happy results.

In mild cases it is only necessary to control your patient, prevent his indulging his appetite, have him placed in a well ventilated apartment attend to the condition of his bowels, and leave the rest to nature. Citrate of Potassa in form of a neutral mixture is highly recommended

by Dr Chew during the whole course of the disease, to which may be added some of the preparations of opium if indicated

Should nervous Symptoms be present we may add Spts. Nit. Ether to the Potash with a good effect. In severe cases however, when we have without any perceptible diminution of the fever deficient secretions, a different course must be pursued. Calomel should be exhibited in small doses combined with opium and Spicac, omiting the latter if the bowels are in an irritable condition, until its effects are perceptible when it should be stopped and the Potash continued to which may be added minute doses of Ant. Potassa Tart.

Should this plan not allay the Symptoms Dr. Wood recommends the administration

of the Oil of Turpentine especially if there is much tenderness of the abdomen. The indications for its use are when the tongue and fauces are dry and parched Showing severe intestinal lesions, acting here as a Stimulant and as Dr. Wood says an alterative to the Ulcerative surfaces in the intestinal Mucous membrane.

It often happens in the latter stages of this disease we have great debility indicating the use of Stimulants and tonics. Wine whey will often be sufficient to support the patient but if this does not succeed, we must resort to more powerful means, such as Brandy &c. As a Tonic the preparations of Cinchona are exceedingly useful given in small and repeated doses with diffusible Stimulates, such as Serpentaria &c. &c.

In the latter stages we often have Hemorrhage from the bowels which may be checked by giving Kino, catechu, Khatany, or an injection of Acetate of Lead. Bed sores are also of frequent occurence. To prevent these great care should be exercised, for which purpose it will be necessary to make the patient change his position in bed, relive the parts exposed to pressure by properly adjusted pillows.

The diet in the early stages should be light and of liquid form - such as Barly water Arrow-Root, &c. &c. In a more advanced stage when the symptoms of debility begin to shew themselves it will be necessary to support the strength by a more nutritious diet such as Beef tea, chicken broth, &c.

It is highly important to attend to the state of the bladder, and if there be retention

of urine to draw it off with a catheter.

In cases of Peritonitis from intestinal perforation, the only hope is large doses of Opium, in connection with perfect rest and the avoidance of all substances internally which can in any way disturb the bowels.

In conclusion I believe that Typhoid Fever should be treated on the expectant plan viz: watch your patient and relieve the symptoms as they present themselves.

Thesis

Inaugural Dissertation

on

Typhoid Fever

Submitted to the examination
of the Provost, Regents & Faculty
of Physic
of the University of Maryland
for
the degree of Doctor of Medicine

by

James S. Bowman
of
Maryland

1863

Enteric or Typhoid Fever.

A few preliminary remarks, concerning the theory of medicine will suffice, before I proceed to describe the important disease, which I have selected for my thesis. It is with much diffidence, that a student, seats himself to give a minute description of any disease, when he is conscious that he has had so little practical experience: but when he reflects, that he has for his perusal, the writings of the most eminent physicians, containing within them, their extensive experience throughout their long lives, and the oral instruction of the honorable faculty of the University of Maryland he with renewed courage assumes the

task which he has so long dreaded.
I will now say — that the profound theory
of medicine is scarcely unparalleled —
that it is paramount in importance
and is the great dispenser of comfort, ease,
happiness, and consolation to persons, whom
the mysterious and alarming pangs of raging
diseases, seize upon; and I will also add,
— that a thorough knowledge of this theory
requires the greatest assiduity, and the
indefatigable diligence of a magnanimous
sagacious and intuitive man —
I will now, without any further remarks,
call your particular attention, to the import-
-ant subject of Typhoid Fever:
Typhoid Fever, is the name by which
the febril affection now under consideration
is generally known.

Although this disease presents a great diver=sity of symptoms, yet there are certain characters so recognizable, that an intuitive and skillful physician, can with facility form a correct diagnosis. Typhoid fever, unlike most other febrile diseases, is confined to no paticular country or people, but belongs probably to the whole human family; but far more frequently do we find this disease, in that section of the country which is not subject to marsh miasm.—

Symptoms, course &c. The disease is sometimes ushered in with a chill, followed by the usual symptoms of fever; but in the United States, it usually comes on insidiously, and increases gradually, until it becomes in many cases very alarming

the unfortunate person whom it seizes feels at first very uncomfortable, as if wearied by long and fatiguing labor, with a heaviness of limbs and more or less head-ache — The skin is moderately heated face flushed and rosy — pulse accelerated — and the tongue covered with a whitish fur, and the patient has little or no appetite. The above symptoms continue to increase slowly for a few days — sometimes even for a week or more, before the patient is compelled to confine himself to his bed; but during this whole time the disease has more or less tendency to remissions. There is generally a chilliness, followed by febrile sensations, until the disease is completely formed; after which, there is no chilliness, except at the commencement —

of some inflammation. Looseness of bowels amounting often to diarrhoea, is met with in a great majority of cases, and even in those cases which appear costive, we find the bowels very susceptible to the influence of cathartics.

At a more advanced stage of the disease we find it exhibiting all the ordinary phenomena of fever. The pulse now becomes more frequent, the heat and dryness of the skin much more sensible the face flushed, but more of a purple cast, than in the former stage.

There is pain in the head and complete loss of appetite. The pulse is however very irregular in this disease and there is sometimes a dusky hue of the complexion with dullness of expression.

Headache is scarcely ever absent, and often the chief symptom of complaint—
Epistaxis is a very characteristic symptom in a vast majority of cases, though in quite a few, to an alarming extent—
A tendency to remission is observed in many cases, daily or twice a day, and the exacerbations subside with slight perspiration, but this is not so frequently the case as in miasmatic fever.
The symptoms above described, still continue to increase, but very slightly for several days = the pulse becomes more frequent and smaller—the skin hotter and dryer—the tongue coat itself with a thicker fur—is very dry with a red appearance at its tip and borders. The patient is disturbed with

transient pains in the right iliac region which is increased by pressure.
About this period, a cough usually attends the patient, exhibiting by auscultation many of the signs of bronchitis.
About seven or eight days from the complete formation of the disease, new symptoms are superadded — The tongue becomes dryer and assumes a brownish color — The abdomen is considerably distended, and red spots like flea bites are observed, first upon the abdomen, then upon the chest, and sometimes even upon the limbs. By close observation we can perceive an eruption of minute vesicles, called sudamina — upon the neck and upper part of the chest.
The patient is now often delirious, and

with buzzing in the ears. If the disease continues without interruption, it assumes a complete typhus form. The tongue, though quite dry, is now often gashed and sore and coats itself with a blackish fur and the teeth are covered with black soodes. A peculiar unpleasant odour, not unfrequently exhales itself from the body. Subsultus tendinus and rigid tonic contractions of the muscles are often observed. The patient being exceedingly prostrated, seems to slip involuntarily down on the bed, and often picks at the bed clothes. Among other symptoms I will mention, involuntary fecal evacuations - retention of urine and hemorrhage from the bowels.

We will now suppose a case to terminate unfavorable

We first observe the pulse giving away, either becoming fluttering and exceedingly frequent, or very slow and scarcely perceptible. The extremities are bathed as it were, in a cold sweat. The distension of the abdomen is greatly increased — the patient assumes a hippocratic countenance, as if death had seized him with its fatal pangs. The sweet sensations of life seem to lose their fragrance to him — he abandons his habitations, dear relatives and friends and alas! bids adieu to all that was dear to him — to seek an abode in some unknown place — we will now suppose the case to terminate favorably.

At first we observe the tongue becoming more moist, and to clear itself from the dark brown fur which usually

commences at the tip and edges — The frequency of the pulse is much lessened and much stronger — the skin hitherto very hot and dry, now begins to relax, and a pleasant perspiration covers the whole body. He is now bereft of the aversion and disgust for food, and his delirious sensations — the dark mist which has covered his mental vision is now removed — new and pleasant thought fill his mind — convalescence now commences, and the patient in a short time although greatly emaciated recovers his strength. In severe and protracted cases, the course is somewhat different, the tongue cleans itself by throwing of flakes of fur from the centre — leaving the

surface, red and shining. A short time before this, we not unfrequently observe, that the fauces are somewhat inflamed. If the tongue, after cleaning itself as above stated, remains moist, we have good reason to hope for a pappy convalescence; but if at any time the tongue remains very dry, we may conclude that the case has been aggravated, and the patient is again in danger. In the latter case, the patient should not despair, although this and other symptoms make their appearance for they often soon disappear under proper treatment; and he is at last, after suffering almost the agonies of death restored to good health.

In the midst of convalescence, however when the patient, physician, and friends have

concluded that all danger is over, he is suddenly seized without any premonition of danger with alarming pain in the abdomen - the face ~~flushed~~ assumes a gastly appearance - the knees are drawn up - there is obstinate vomiting great contraction of muscles, and in a short time vitality ceases, and he is compelled to yield all claims to this world, and take his exit to a distant clime; - This very remarkable and alarming change is doubtless caused in most cases from perforation of the intestine. There are certain characteristic symptoms in this disease which require our particular attention. A few of which I will now give a short description:

Diarrhoea occurs, far more frequently in this disease, than in any other febrile affection — though it is not so frequently met with, as has been asserted by some. It occurs so often however — that it is considered one of its chief diagnostic sign — and the facility with which purgative medicine acts upon patients thus affected is very obvious. Diarrhoea usually commences about twenty four hours after the attack. The stools may be only one a day, or a dozen or more — they are generally of a more healthy appearance than in the diarrhoea of other diseases. Tympanitis very often occurs in this disease, but not often before the sixth or seventh day — Sometimes it is not very obvious, but its latent symptoms are revealed upon percussion. At sometimes occasions an enormous distention of the abdomen, so as to interfere

with respiration, by pressure upon the diaphragm the morbid collection of air is chiefly in the colon. The rose colored eruption is a very characteristic phenomenon of this disease, which occurs in a vast majority of cases. This is very obvious on the abdomen between the first and second weeks. Cough and the bronchitic rales are very common. The cough is sometimes dry at other times, it is attended with slight mucous expectoration. Dry sonorous rales may be heard over the chest. Pus often affords a very important diagnostic sign.

Hemorrhage from the nose is scarcely ever very dangerous in this disease; but hemorrhage from the bowels generally requires the careful attention of the physician. Stalitude of mind, delirious sensations, hardness of hearing, and sloughing of the skin, are very

remarkable in enteric fever -
Anatomical characters. Every organ in the
human subject, with scarcely a single
exception, exhibits signs of inflammation
after death, in typhoid fever - and the
inflammation of the glands of Peyer, is so
universal - that its absence is considered
to cast a great doubt upon the mind
of the physician, whether the disease
was, or was not enteric fever - or in
other words, - its presence has been consid-
-ered essential, on post mortem examina-
-tion, as a sufficient test, for the disease
in question. Some of the minute glands are
hard to the touch, while others are quite soft.
The former are found upon dissection to
contain, beneath the mucous membrane, a
layer of firm white or yellow substance

which is quite brittle - the cut surface presenting a smooth and shining appearance -
The soft glands are less elevated and distinctly the whitish layer observed in the ~~latter~~ former - the hard patches sometimes undergo resolution, or ulceration, but the soft always ulcerate. Minute solitary closed glands of the ilium, are often affected in the same manner as those above described. The mucous membrane of the ilium, between the glands, not unfrequently exhibit signs of disease. The mesenteric glands are constantly diseased, and present a redened and enlarged and softened appearance -
The lymphatic glands in other parts of the body are redened and enlarged -
The pharynx and oesophagus are in most cases ulcerated and even the gastric mucous

membrane is in some cases diseased. The spleen is in many cases much altered and softened, and enlarged to several times its own size. The liver and kidneys are in some cases softened, but not so frequently and to such an extent, as ~~in~~ many of the other organs.

Causes— The causes of enteric fever are very complicated, and the circumstances producing it are very diversified. Human effluvia are thought by many to be the chief cause of this complaint, and this opinion seems to be very plausible, since we find this disease most frequently, in situations, where persons are crowded together, such as thickly populated cities, pressure hospitals badly ventilated and on board of ships. Human effluvia cannot be the only cause, by which this

disease is produced, for we find it quite frequently in the country, where the patient has the advantage of the sonorous and refreshing air and placid breezes of a healthy country seat. There can scarcely be a doubt that miasmatic effluvia have produced the disease in question when the patient was predisposed to it. I think it very probable that this disease can be produced by anything that has a tendency to contaminate and vitiate the surrounding air which the patient is compelled to inhale. A great diversity of opinion exists whether or not this disease is contagious. Many facts have been adduced to confirm the opinion that it is contagious, while others equally as plausible have also been adduced by those who deny its contagiousness.

This question is still unsettled, but I think, if it is contagious at all, it is very feebly so, and only under certain circumstances. It has been observed, that certain persons are far more predisposed to this disease than others. Age seems to have quite a sensible influence, and persons between the ages of ten and thirty five, are much more likely to be attacked than those of any other age. Enteric fever may occur at any season of the year, but more frequently in autumn and winter.

Like most of the contagious diseases it scarcely ever occurs in the same person more than once — which seems to corroborate the statements of many that it is contagious. Fatigue, vicissitudes of weather and mental disturbance seem

to act as exciting causes. We sometimes have a complication of diseases, that is, enteric with typhus or myasmatic fever. Therefore we see good reasons why this disease presents a great diversity of appearances. Nature Many have supposed typhoid fever to be a more gastro enterites — but we do not always find the stomach inflamed and the symptoms are quite different from those of ordinary mucous enteritis, and upon dissection we observe a great difference in the condition of the glands of Peyer. There seems to be no necessary connection between the intestinal affection, and the various other symptoms such as epistaxis at the commencement of the disease, the tendency to stupor — the bronchial inflammation, and the rose colored eruption

It is very probable that the disease of the intestinal glands, is an internal eruption, similar to that of small pox upon the skin and may possibly be a characteristic attendant upon the complaint. We are yet in the dark concerning the nature of typhoid fever, as well as, the positive nature of all the exanthemitous fevers.

Diagnosis. Many of the symptoms mentioned in the first part of this thesis which differ very materially from those observed in other fevers are the most characteristic and diagnostic symptoms, such as the slow and insidious mode of attack — the almost constant presence of diarrhoea at the commencement — a tendency to epistaxis — the dullness of expression — cough and bronchial rales — the dryness of the tongue and great diminution of secretion — tympanitis rose coloured eruption

stupor and delirious sensations, a slight deafness and many other signs, indicative of typhus:- Enteric fever is most frequently confounded with remittent or bilious fever but from this we can distinguish it by the more decided remissions of the bilious and the bilious vomiting the yellow appearance of the skin - its much shorter duration and its tendency to end in intermittent - also by the various symptoms of typhoid fever that have been mentioned in the preceeding part of this thesis, which I think would be superfluous to mention again - Upon dissection we find corroborative facts which confirm our diagnosis - In bilious fever the stomach is more frequently inflamed and the discoloration of the skin much more obvious.

the spleen and the glands of Peyer are less diseased. When bilious fever assumes a typhoid form, a correct discrimination is much more difficult.

The diagnosis between enteric and typhus fevers will next attract our attention. We find typhus commencing more sensibly and is generally of shorter duration.

The condition of the bowels forms a good basis for our diagnosis in typhus instead of finding diarrhoea, or a great susceptibility to the influence of cathartics as we almost invariably find in typhoid - we find the bowels remarkably constipated. The fecal evacuations are usually darker and more offensive in typhus than in enteric. Hemorrhage from the bowels which occur not unfrequently in the advanced stage of

enteric fever, scarcely ever occurs in typhus and epistaxis, so common in typhoid, is seldom met with in typhus. This latter disease scarcely ever attacks the old and is little if at all contagious. while we often find typhus making its appearance and seizing as its victims, the old and debilitated, and is also a very contagious disease; very rarely making its appearance in isilated places, as we often find typhoid. This disease is sometimes mistaken for enteritis, and some stages of the disease require careful examination; but by close observation throughout the disease, we are enabled to discriminate correctly. We should not however be to hasty in giving our decision, as there are many diseases which present symptoms differing not

very materially from each other — —

Prognosis. This disease is a very serious, and in some countries, or in some epidemics, it is very fatal. It has been observed that its fatality is much greater in hospitals than in private practice. In some epidemics, it has been so fatal that at least one third of those whom it seized sunk under its violence, and breathed for the last time the pleasant and refreshing breezes of a terrestrial habitation. Although this is a very fatal disease in some epidemics yet in private practice, we find it yield more readily to proper treatment, than most other diseases which present such alarming symptoms —

It must be admitted that we are not possessed with the ability of suddenly checking entire

fever but can certainly alleviate the patient and shorten the duration of this prostrating disease and very frequently conduct it to a favourable issue—

No case should be considered to low and prostrated, if vitality exists to be again restored to health, fatal symptoms may be present, and death may appear inevitable and still the patient may again be restored to health; but we confess with much regret that cases, apparently slight, must not be looked upon as free from danger—for perforations of the intestines may take place or some unexpected complication may make its appearance, and greatly disappoint our seemingly well founded expectations. We should therefore always be cautious in forming our prognosis—

We will now mention some of the unfavour-able symptoms such as complete delirium and profound coma, excessive subsultus and rigidity of the limbs — abundant diarrhoea and hemorrhage from the bowels — involuntary discharges and great prostration — extreme frequency of pulse and colliquative sweats — great distention of the abdomen, and a notion on the part of the patient that nothing is the matter with him. On the other hand the favour-able symptoms are — a diminution in the frequency of the pulse, and heat of the skin an increased ~~frequency of~~ consciousness of surrounding objects, a disposition of the tongue to become moist, and a restoration of healthy secretion.

Treatment. It would not be proper in-

this disease, as in most other febrile affections to commence the treatment with active cathartics. since there is not unfrequently diarrhoea, and always a great susceptibility to purgative medicines; but our reason confirmed by experience, tell us that we should first thoroughly evacuate the bowels to free them from all irritating matter. Sulphate of magnesia, or castor oil, may be given in small doses at the commencement of the treatment the latter being prefered, when there is much irritability, and when there is diarrhoea, accompanied with pain, it is advisable to administer the oil with fifteen or twenty drops of laudanum.

It is necessary that one evacuation should be obtained daily, but as there is often

looseness of the bowels, it is seldom
necessary to give cathartics to remove this.
If at any time, the bowels have a costive
appearance, we can with facility obviate
this by administering any of the mild
cathartics such as a single scruple
powder — a drachm of castor oil — a
drachm of Epsom salts — or half a drachm
of magnesia. The latter being preferred
when there is acid in the circulation.
If the cutaneous eruption is virulent in
patient it is advisable to give injections
When we administer medicines they we
should commence with small doses —
particular in the incipient stage, but
in the advanced stage it is sometimes
proper to accompany them with the
oil of turpentine — it is very important

that we bear in mind that drastic medicines should not be used in this disease, as they are less easily borne than in most other febrile diseases. The bowels having been evacuated our attention is next called to obviate the febrile symptoms. If the pulse is very full and strong, and there are signs of congestion of the brain or other vital organs so much so as to involve life in danger we should resort to blood-letting and may draw from the patient ten or fifteen ounces of blood with very material benefit: but in the great majority of cases we are happy to say bleeding is unnecessary. The extraction of blood in this disease

in cases which do not positively demand it, is often productive of great harm, because enteric fever is generally a very prostrating disease, and the patient should not be unduly weakened. Bleeding in this disease is designed for no other purpose, than to prevent accompanying inflammation and is very seldom called for after the first week.

The abstraction of blood locally by cups is often productive of much good. We should employ refrigerants diaphoretics from the commencement, and continue them until we have subdued the disease. The antimonials have been recommended by some, and in the incipient stage are no doubt very useful if they do not irritate the bowels. but in the advanced stage some of the

other diaphoretics are preferable on account of the sedative affect of the latter forme remedy. The citrate of potash, in the form of mutual mixture or effervessing draught supersedes all other diaphoretics in this disease. It may be given at all times when the skin is hot and dry and when the stomach is not irritable. It may very properly be combined with tartar emetic. On the appearance of nervous symptoms the spirit of nitre may be used and at all stages when uneasiness of the bowels is observed it is well to administer opium. Some suppose the acetate of ammonia to be superior to the citrate of potash, and doubtless this medicine acts well in this disease. The diaphoretics should be given every two hours during the day and as

often during the night when the patient is awake be we should not arouse him from his silent slumber to administer it; as it is much better that the night be past in sleep. To procure sleep we may administer a dose of Dover's powders or a pill of opium and ipicac.

When the heat of the skin is very great we will find cold ablutions very refreshing and alleviating to the patient and ice held in the mouth is quite refreshing as well as very serviceable, when the patient is not greatly prostrated.

When there is much headache we may apply leeches and ice in bladders to the head for pain in the abdomen, with flatulent distention, we employ local bleeding warm fomentations and rubefacients.

large mash-bowlers covering the whole abdomen, and kept there for several days are in some cases very servisable. In obstinate abdominal ~~distens~~ tenderness we may resort to blisters. The diarrhoea should not be disturbed unless it becomes exhausting, but in those cases we should resort to ~~some~~ some means to check it, which can generally be done by administering a dose of opium and ipicac accompanied with acetate of lead or some substance containing tannic acid. The nervous symptoms may generally be quieted by the sweet spirits of nitre, or the opiates if these are not contra-indicated.

The above treatment will suffice in the most favourable cases, but often after the seventh or ninth day a condition of

things supervene which must be met by other remedies - At this time there is generally a diminution of secretion. The tongue and skin become dry and the urine scanty - the abdomen becomes tympanitic we observe some degree of delirium and the energy of vital actions seem to abate, without any diminution in the violence of the disease. Under these circumstances, mercury is our effectual remedy, given so as slightly to affect the gums; for bleeding is now inadmissible and we possess no remedy which acts so well as an antiphlogistic and at the same time tends to increase the secretions, as this medicine. It is very probable that mercury has some power in arresting the diseased in the glands

of Keyes — a slight impression upon the gums should however only be made. It would be very unwise to administer large doses of calomel to attain this. Minute doses of blue mass, given at short intervals until the gums are slightly touched, being our proper mode of treatment. When the stomach is not irritable, a small quantity of ipecac. may be given with the blue mass, to increase the expectoration, and also for its diaphoretic effects. Under this treatment the tongue not unfrequently becomes moist — the skin relaxed, and all other symptoms ameliorated. The greatest care should always be taken to avoid ptyalism. In the great majority of cases, the above treatment will suffice for the restoration of health. —

If this course of treatment is not successful and bad symptoms still continue, such as dryness of the tongue, and abdominal distention, we then resort to the oil of turpentine. This may be employed in all cases in the advanced stages, when the tongue is dry. In cases where the tongue cleans itself by throwing of the fur in flakes, and then becomes quite dry - and tympanitis is present - and signs which show an aggravation of the disease, this medicine is found more efficacious than any other that has ever been tried. It acts as a stimulant, ~~owing principally~~ but its chief beneficial effects in this disease is doubtless, owing principally to its alterative effect upon the ulcerated intestinal mucous membrane.

The oil of turpentine may be administered in doses, from five to twenty drops every hour or two. After twenty four or forty eight hours, we generally find the symptoms to improve, and disappear and the patient is soon in a convalescing condition.

The dose may be diminished as the patient convalesces, but should not be abandoned at too early a period. In the advanced stages of this disease when there is much debility, it is advisable & and even essential to use tonics and stimulents. We sometimes resort to them, in the early stage, when there is great prostration, but generally they are not called for until after the second or third week. The practitioner must be guided by the condition of the pulse and various other symptoms which

indicate the use of tonics in other diseases. ~~Whine~~ Wine whay and the carbonate of ammonia are among the most suitable stimulants. Pure wine and sulphuric ether are sometimes used in cases which are greatly prostrated. Opium is sometimes used very freely, as a stimulant in the advanced stages, and even for other very important purposes, such as relieving nervous disorder, promoting sleep, checking diarrhoea, and producing perspiration. Sulphate of quinia has been recommended in large doses in this disease, but doubtless erroneously. When there is coldness of the limbs, rubefacients should be used, with internal stimulants. In obstinate delirium or coma, the head should be shaved and a blister applied to the whole head.

When excessive subsultus, great nervous restliness and jactitation are present we then resort to the antispasmodics - such as musk, assafoetida and camphor. Hemorrhage from the bowels, should be treated with acetate of lead kino &c. In obstinate cases of epistaxis, should the ordinary means for arresting it fail we must then plug up the nostrils. Erysipelas may be treated with the local use of nitrate of silver or tincture of iodine. In cases of peritonitis, from intestinal inflamation, the only hope is in perfect rest and large doses of opium, with occasional blistering. The patient should change his position quite often. The state of the bladder should be attended to, and if there be retention of urine, we should

insert a catheter, in order that it may be withdrawn. Various other remedies have been recommended, such as emetics at the commencement, nitrate of silver, alum and chloride of soda, acetate of lead and sulphate of quinia. The latter is doubtless very useful, when the disease is complicated with intermittent fever. It is very important that we pay attention to the diet in this disease. In the early stage nothing should be administered except in a liquid state. Rice water, barley water, solution of gum arabic, sago, tapiaco and arrow root, molasses and water and a little gruel are very appropriate. The sweet juice of grapes and oranges, lemon-ade, carbonic acid water. At a more advanced period it may be

advisable to give a cup of tea with a little toast bread. In the prostrated stage, the diet should be nutritious and stimulating such as animal broth, eggs beaten up in wine. Milk punch and the essence of beef and mutton. Pure milk is sometimes found very useful given in small quantities and repeated often. If the stomach be irritable it will be advisable to accompany it with lime water. Great attention should be paid to cleanliness and ventilation and when there are many patients crowded together great advantage will accrue from sprinkling the floor of the chamber with chlorine. If the patient be troubled with excessive, and exhausting sweats during the night we administer the mineral

acids, and the simple bitters to encounter them. When a hectic excitement continues for a considerable length of time, and there is a febrile paroxysm every afternoon we find sulphate of quinia accompanied with the oil of turpentine, the best remedies to combat the above symptoms. It is very necessary that the diet should be mild and easily digested as well as nutritious and the patient should be careful not to indulge too freely. He should also refrain from premature and fatiguing exercise, either mental or physical, if he desire an early recovery.

An

Inaugural Dissertation

on

Menstruation

and the causes of the

CATEMENIA,

respectfully submitted

to the examination of the

Provost, Regents

and

Faculty of Physic,

of the

University of Maryland,

for the Degree

of Doctor of Medicine,

by

Joseph E. Benzinger,

of Maryland.

1863.

Of the numerous subjects pertaining to the Study of Physic and offered to the Student as proper for thesis, which I should accept or having accepted I can enter upon with most prospect of success, I have for sometime deliberated upon and as long doubted. I have however determined to offer a few remarks upon the Phenomena of Menstruation, not that I expect to discover anything new or to adduce principles before undiscovered; neither can I hope to enlighten upon a subject investigated and reinvestigated by such able Pathologists; as, Boehaver, Velpeaux, Lee, Bischoff, Blundell and a host of other able and learned gentlemen.

A like desire and a like attempt, would be considered as unbecoming in one, who, just entering the paths of medical science is more willing to be taught than to strive to teach; such indeed is not my intention.

is not my intention it is my desire solely to select from the chaos of opinions offered upon this subject, those which I consider as plausible and true which I consider as false and to know that which is correct and wherein each is faulty. It may possibly happen that in dissenting from the views supported by some illustrious gentleman I shall subject myself to censure, if not to contempt. It is not however without becoming diffidence and distrust of my own abilities, I enter upon the arena of Physiological controversy and measure lances with some of the most experienced knights of Medical Science. It is almost futile to attempt a dissertation upon any subject whatever, without fully understanding the nature of the subject to be treated. Of Man-

-kind

truation however of my own individual knowledge I must plead entire ignorance: it therefore only remains for me as the arbiter of the differences of others to show naturally and theoretically why some are accurate and others inaccurate.

It may not be inadvertant to the subject, to make a few remarks in regard to Menstruation itself; independant of its causes, effects, and end.

There is a natural function, a sanguineous discharge from the sexual parts to which all women in all ages and portions of the world have been subject. This phenomenon has been among the common people variously known by the terms Menses - Flowers - Monthly discharge, Show - Courses - Regulars - Monthlys, Time, Turnes - Turns, Reds, Troubles - Changes &c and is frequently alluded to in connexion with a significant

a significant and usually reddily interpreted mod— This new function the 'Catamenia' from a 'Κατα', according to and, 'μην' the month: the absolute compass of health or disease in woman, is established with more or less difficulty, in the midst of the great revolution, the great Metamorphosis from childhood to youth, from puerility to puberty. Its first appearance, which is always determined by the ovarian evolution of which it is one of the epiphenomena; reveals the aptitude of the female for fecundation and constitutes one of the earliest signs of nubility. This age is announced in both males and females by characteristic changes. The general organization in the two sexes, which until now had progressed alike, seems suddenly to diverge;

Local and.

Local and general Phenomena appear: the local are purely physical, thus; the cellular tissue becomes more harmoniously distributed, the form rounded, the pelvis expands, increasing in every diameter; the voice alters, becomes softer and more musical, the appetite whimsical, the taste capricious, the person languid, the countenance pale or hectically florid, with a dark, brownish appearance under the eyes; the mammae are developed, the nipple projecting, turgescent and sensitive, the areola darker than previously, the cellular tissue radiating from the breast and hypogastrium, as from two centres, towards the neck, at the same time, proceeding to form a soft cushion for the upper parts of the limbs. The uterus also undergoes changes, becomes enlarged and more vascular, its surfaces rounded; the Os Tincae more regularly rounded, its labia

swollen

swollen and the lining membrane of its body thickened, softer and of a darker color.

Previous to puberty, the ovaries are small and pale, the Graafian vesicles are very minute and few in number and are supposed never to attain their full development but soon shrivel and disappear, instead of bursting as matured follicles do; and the ova are incapable of being fecundated. At nubility however, the ovaries enlarge and become vascular, the Graafian vesicles are more abundant and attain a greater degree of development, and the woman is capable of the reproductive function.

The moral faculties, undergo a proportionate alteration. The girl becomes more diffident and reserved; her eyes sparkle; brilliant and anguishing as they are, at the same time express the strange.

the strange and unusual sensations she experiences, commingled fears and tenderness — vague and indefinate desires; the sense of her own weakness and her peculiar feelings; are the causes, why she dares no longer to approach the companions with whom she sported in childhood but with downcast looks and a chaste demeanor; whilst the gentle modesty and confidence which animates her countenance and the seductive graces of her conduct; soon disclose a power whose existence she never before suspected and renders it true to say, that, 'the Marriageable age in the softer sex is the spring time of Nature.' It is during this great change, the immediate subject of my Thesis occurs: the Catamenia become evident.

In treating directly of this Phenomena I find it convenient to dispose of my subject under the following heads. 1st the time, duration and quantity

of the eruption

of the eruption. 2nd The Seat, nature and qualities of the menstrual flux. 3rd The causes of the Menses. 4th Their cessation.

Great discrepancies are observed in different climes in regard to the time of Eruption, varying according to climate, conditions of life, degree of nourishment and various other causes. In our temperate countries, the menses appear between the twelfth and sixteenth year, with a slight variation of 8 to 12 years, in Southern climates and from 15 to 20 years in the North. Some travellers assert, that the Eastern woman menstruate and are capable of becoming Mothers at the age of 6-7 or 8 years: that, in Asia, or India especially, they become regular at 7 or 8 and become Mothers before they complete their tenth year. — Whilst in cold latitudes, or nearer the poles, the Menses do not appear until

the 23rd or 24th

the 23rd or 24th year. Roberton contends that climate has little or no influence upon the hastening or delay of the menstrual discharge, but, that the greater precocity in the inhabitants of the warmer climates is owing, not so much to the immediate effects of the climate as to the greater demoralization of the inhabitants. To what this demoralization itself is due he does not inform us: And Dr Vaigas affirms that in the white the Menses are more precocious than in negros. The inconsistancies presented by opposite countries in Mass, may be found to exist in the details of every country and occasionally in those of every province and city. A low temperature, residence in the country, rural occupations a frugal regimen, a feeble and delicate constitution appear to retard the [illegible] of the Menses, and a warm climate, robust constitution, residence in

populous cities

populous cities habits contracted there; a life of pleasure the immitative arts, Music, painting & dancing; the frequenting of balls, the theatre, novel reading, good living - and the use of stimulating drinks, tend on the other hand to accelerate its appearance.

The precocious development of puberty is less favourable, in a female of a robust frame, a lymphatico-sanguine temperament; very stout, and whose sensibility is not very acute; than, in one who is thin, delicate, nervous, irritable and sanguine. Even at Paris girls are observed to become regular at a very early age. In a table from the work of Müller giving an idea of the variations of the menstrual period in different countries, Brierre observed in Paris three different cases of early menstruation, at the age of 5 years - 1, at the age of 7 years - 1, at the age of 8 years - 2, at the age of 9 years - 11, at the age of 10 years - 29; Raciborsky, in the same table

gives as the

gives as the result of his own observation, at the age of 9 years - 1, at the age of ten years - 7, at the age of 11 years 18, at the age of 12 years - 34. Velpeau mentions several cases with which he met: one who became regular at 9 and a half years, another at 6 and a half years, and a young lady in a family whom he visited, who, at the age of fourteen presented as vigorous and as matured an appearance, as a woman of 20 years, and who had menstruated regularly since she was eight and a half years old, children and [illegible] also who were regular at birth. Velpeau also mentions a girl at Havanah, whose courses appeared first when she was eighteen months old and returned regularly every month; the child had moreover, a bosom, a decided character of countenance and all the marks of anticipated puberty. Women were seen at the same city who did not menstruate

until the 17th

until the 17th 18th 19th and 20th years. Dr Lusewing knew of a girl ~~seventeen~~ months old who had menstruated since she was a year old: the hemorrhage returned each month, and the breasts and 'mons veneris' were those of a girl of 14 or 15 years of age. Carus, observed a woman who menstruated when two years old, became pregnant at eight and died at an advanced age. Many other similar cases are recorded by, Schafer, Louis, Roberts, Le Beau Desenet, Comarmond, Clarke, and a host of others. That these precocious menstruations are owing to the same causes which determines their appearance in most women about 15 years of age is now generally acknowledged; being always accompanied by the development of the breasts and other characteristics of puberty. Then are the evidence that, influenced by an anomalous

vitality of the

vitality of the ovaries the Graafian vesicles have undergone a premature development.

Examples of tardy menstruation are not wanting; thus, we learn from the table of Müller to which I have above referred, that, 5 women menstruated for the first time at the age of 23 years 6 at the age of 24 years and 2 at the age of 25 years. In some instances the first appearance is delayed for a much longer period. Klaman mentions a woman who was married at the age of 27 years and who did not menstruate until 2 months after her eighth confinement; she then continued regular until her 54th year. Pecklin also speaks of a strong, healthy, married woman who never menstruated although she was 40th years of age.

The absence of the menses seem to depend upon some faulty conformation of the womb or its appendages,

so it may

so it may be generally considered as a sign of sterility: if we compare however these cases of tardy menstruation with numerous instances incontrovertably established, of women who became mothers without ever menstruating and in whom the suppression of the menses did not prevent conception, it appears beyond a doubt to be a secondary and not primary phenomena intimately connected with those which are accomplished in the ovary. The congestion which precedes the haemorrhage is commonly indicated by new symptoms; general lassitude, uneasiness in the limbs, pricking, & tension and swelling in the hypogastrium and perineum, lumbar and sacral pains, weight in the loins, heat in the hypogastrium and briskness a slight pruritus and tumefaction of the sexual parts,

a disposition

a disposition to yawn, pain in the head, giddiness, an inclination to vomit and sometimes absolute vomiting, painful swelling of the breasts and other uncomfortable feelings. Parvin states that the excitement of the genitals is so great as to produce a violent reaction and the first appearance of the menses is accompanied by fever & strange nervous disturbances frequently occur. These symptoms may last from one to eight days and are followed or accompanied by a more or less abundant flow of at first a clear, yellow mucous discharge, in a few days this becomes mixed with blood and soon gives place to a discharge of pure blood. This flow continues for several days and then as the amount of blood mingled with the vaginal mucosities diminishes the flow becomes less colored and soon resumes the character

the character of the vaginal secretions, then cease entirely. Quite frequently the discharge of blood without any premonitory symptoms and often whilst the young girl is taking exercise or performing her accustomed avocations; in others the emotional pains and uneasiness which are regarded as the precursor signs of the approach of the first menstruation may not be followed by a flow but after certain several days disappear or they may recur thus every month for a certain time, with a slight disturbance of the general health and it is only apparently after several fruitless attempts that the catamenia become established in a complete manner. The symptoms which herald the first menstrual flow do not in general appear at subsequent periods of the monthly return except with diminished intensity.

In some cases nevertheless they reappear with their original violence: these pains however generally disappear upon the first congugal approach and especially after pregnancy. In the greater number the return of the Menses is throughout life indicated by some slight pains, a little uneasiness or merely by a marked disturbance of the general condition, the womans temper is less even and she becomes less amiable. Usually they do not become regular until three or four periods have elapsed. In the succeeding appearances the discharge lasts variously from a few hours to a week, but the average term is four or five days. When once established they assume their regular periodicity which is generally preserved up to the proper time of their cessation; without other interruption than that which is occasioned by nursing, pregnancy or disease. Raciborsky, states, that 'these irregularities in the return of the second period, may, doubtless, be due to a morbid condition requiring treatment;

but they may

But this may also depend upon an atony of the genital organs which does not allow the development of the Graafian vesicles to continue. This temporary atony does not interfere with the general health of the female, nor prevent the future performance of the functions; it often disappears under the excitement produced by a change of life or by the first conjugal approaches. The periodical return of the menses, takes place ordinarily every month as their name indicates, or rather every 28 or 29 days; in some they are observed to occur at a nearer or remoter period; sometimes only 23 – 20 – or even 15 days elapse between each menstrual period; others are regular only every 32 or 40 day and even only every 2nd or 3rd months, without being incommoded.

Velpeau mentions a person of his acquaintance who was never free from the discharge for more than 12 days at a time, this regular discharge without, however

incommoding

inconvenience to health are observed more especially in warm climates, and on the other hand a longer lapse of time between the catamenial revolution is more frequently discovered in Lapland, Greenland and other cold countries. The duration of the flow as we have said may last from one hour to a week or longer.

Briere, regard the most common period of the duration of the discharge, as six days, and next in order of frequency, three, four, two, five, one, six and ten days. Many observers have noted 3 or 4 days as the most usual duration. In some exceptional cases, apart from pathological condition, it may last for one or two hours only, and in others quite as rare, it may be prolonged for twelve or fifteen days. The quantity of blood that escapes is variable for the same woman and more especially so in different individuals: Hippocrates, according to Galen, estimated it at two cotyles or 16

ounces,

ounces. Haller at six, eight or twelve ounces, and Bandelocque more properly at 3 or 4 ounces.
The quantity of the discharge is greatly influenced by habit, mode of life, diet and climate, being much greater in rich and indolent females, than those placed in opposite conditions; according to some authors climate exerts a very marked influence upon it, it is certainly most profuse in those places where its relaxance is most precious, and European women who go to inhabit a warm climate as for instance Java or Batavia often perish in consequence of their profuse Menstruations and in general females menstruate more abundantly in Summer than in Winter.
The amount of the discharge is not the same throughout the menstrual epoch; ordinarily it flows more moderately on the first and second day than upon the third and fourth and then gradually

declines.

declines. Neither is the discharge continuous; sometimes it ceases for 1 or 2 days or sometimes for one or two hours only, and reappears under the stimulus of a slide or walk. Moral emotion, the habits of the body, the digestive action, and especially the influence of cold are the causes which may determine its momentary or final diminution or suppression. On account of these changes it is impossible to have any certain data in regard to the quantity of the discharge, and as the blood that flows from the organ can only be collected upon cloths or in water, it is manifest that the observer must frequently form an erroneous opinion and can only acquire approximate results; though, appreciating the amount of blood lost by the quantity of stained linen, we can accept the estimates of Baudelocque and Haen, who set it down as averaging from 3 to 4 ounces, as nearest the truth.

The second head

of my division

of any division. The seat, nature and qualities of the menstrual discharge, has given rise to great differences amongst Physiologists. The seat of the flow, is a subject on which some disputation still exists. The majority of writers in all ages place it in the uterus, but some Ancients as well as a number of moderns amongst whom is Desormeaux, who have seen the menses escape immediately from the vagina in the first constitution the uterus during pregnancy; and so at the time of conception the mouth of the womb is plugged up with mucous: the fluid in the customary way in which it passes off, cannot be discharged from the inside of the womb. An effusion in the usual way would necessarily bring a serious incommodity upon the child, if it did not endanger its life. They contend therefore that the uterus cannot furnish them when they flow during pregnancy. It appears easy however to reconcile these opinions.

these opinions. Facts most authentic and multiplied prove incontestably, that the blood of the menses comes from the uterine cavity in the majority of instances. In persons whose courses had been long suppressed, in consequence of disease, or had never appeared on account of some faulty organization of the vagina or vulva; the womb has been found full of, and distended with blood. And in women who died menstruating, where there was an accumulation of blood in the cavity of the womb, which is sometimes seen covered with ecchymoses. The blood is seen issuing manifestly through microscopic fissures in the internal surface of the mucous membrane of the uterus. This fact which is incontrovertably attested by numerous autopsies of women who died during menstruation; had already been proved by the touch and the speculum, whereby the blood has been felt and seen to flow from the

orifice of the.

orifice of the uterus. Prof. Nathan R. Smith, mentioned, that in a case to which he was called, in which 'Prolapsus uteri' of the greatest magnitude had occured, during the period, the menstrual fluid was seen, plainly visible, exuding from the surface of the mucous membrane of the everted uterus.

On the other hand however it is equally certain that it has been seen to exude from the vagina or vulva: in truth for reasons stated above it could not be otherwise in women who continue to menstruate during pregnancy. But these are exceptions, anomalies, and do not invalidate the general rule. Menstruation is but deviated from its usual route in the same manner as when any impediment opposes its passage through the womb it takes place from the urethra, the rectum, the pulmonary passages, the breasts or from some portion of the tegumentary surfaces. These irregularities moreover are rare and appear

in more than

in more than one instance to have been the effect of real disease and when this is the case it must be regarded as morbid. Various unsatisfactory attempts have been made to ascertain the immediate source of the menses, one party placing it in the veins, another in the arteries or the capillaries, others think it is to be found in certain particular glandules or in peculiar little receptacles or in a supposed set of venous sinuses; however whether it is derived from the arteries, veins or elsewhere, the mechanism of the function is always the same and that is what it imports us to know. The character and qualities of the menstrual flux have greatly perplexed the minds of ancients Physiologists. Hippocrates and Aristotle says it is similar to that which flows from a wound or a slaughtered animal. Prof. Meigs considers it identical with venous blood and new medical men of the present day oppose this opinion.

this opinion. Curious ideas prevailed at one time in regard to the noxious nature of the menstrual blood. According to Pliny, the menstrual fluid was considered as endowed with the most dangerous properties; capable of turning the cheeses in a dairy, wilting the flowers of a parterre or making a whole family sick. Travellers state that even now in some parts of the world, women in the menstrual period are so much dreaded, that they are obliged to wear a mark that advises people of their situation that they may flee out of their way. It is more than probable that these fears are in general unfounded, but, as few popular prejudices are void of at least some truth, and when we reflect on the sickening odor derived from the different secretions of some animals or the aroma exhaled from the skin of certain women, can we in fairness reject all that has been said in relation to the menstrual fluid?

Pliny, may

Pliny may have exaggerated, but it is evident that
blood retained for some time within the vessels,
particularly in women who are inattentive to cleanliness,
may by its decomposition acquire certain deleterious
properties. It is, however, now by most authorities considered
as innocuous. By some it was regarded as an antidote,
different kinds and 'Sanguis menstruus primum haustus'
was more than once given internally as an antiepileptic.
The odor of the menses has been compared to the
marigold, but with its peculiar odor, we have no
reason for comparing it to that rather than to anything
else. Although it is found fluid and does not coagulable
we are not authorized to infer with some authors that
it contains no fibrin, or that it is altered blood and
deficient in fibrin, microscopic investigation discovers
nothing essentially different, and it has to frequently
been seen to escape in clots from women who for some-

time have

time have been sitting and rise suddenly to walk, to conclude that menstrual blood never coagulates.

Being mixed with the serous and mucous matters naturally furnished by the internal surface of the genital organs it is rendered more viscous and ought not to exhibit the precise characters as pure blood which flows from a wound; And it is also owing to this cause that it occasionally has an acid reaction. Its physical qualities, vary of course in accordance to the period of examination, since it is mixed from the beginning to the end of the flow with different amounts of vaginal mucous.

Prehaps no question in science has given rise to such lively discussion in all ages as 'the Causes of Menstruation'; and at this very day there still exists a difference of opinion among some few Medical Gentlemen, Some authors have laboured to prove with

Galen, Simson

Galen, Simson and Lobstein that the menses depend upon a general or local plethora, upon a superabundance of blood; others pretend that the menses are occasioned by a too large proportion of azote being contained in the uterus. Dr Clifton refers them to the relative weakness of the venous parietes and the perpendicular effort of the blood. Some like De Graaf think they are produced by a principle of fermentation. Stahl and Boyle suppose they arise under the influence of an irritamentum or peculiar diathesis. Some have also traced the causes up to an immaginary influence of the moon, hence the term Lunaria. others have endeavored to discover them in the bile. Emmet, who attributes them to an erection and Lecat suppose them to be the effects of increased desires. To these numerous and whimsical hypothesis it is unnecessary to pay more than a passing glance. Those, who contend for the existence of plethora, or the relative weakness of the vessels of the womb, have failed to inform us how it comes

how it comes to pass, that congestion, accumulating by degrees into a mass, burst forth at stated periods; or why, this superabundance of blood effecting all women and in all climates and at the same epoch of life, is collected and paper off every 28 days, until the vessels shall become so dense and firm as to altogether resist its further egress. The conjectures of Lunar influence and the opinion advanced of the derivation of the menstruous operation from the quantity or quality of the bile, may be set aside in a few words; but without stoping to further demonstrate the incorrectness of these palpably false opinions, we will proceed at once to investigate the theory that referred this singular phenomena, to the undeniable and easily verified fact; derived from the labours of, Négrier, Costé, Pouchet-Raciborski, Lee and Bischoff; namely, "The successive evolution of the Graafian vesicles." That the cause of menstruation, is the evolution of a Graafian vesicle would be indisputable:

if, First

if, First, the examination of women who died during the menstrual period has uniformly revealed the above named changes in the ovary; Second, That the absence of the ovaries involves of necessity the absence of menstruation; and, Third, That there is a complete analogy between the anatomical and physiological phenomena of the heat of animals, and those which accompany menstruation in the human female. First, since attention has been directed to the subject no one has instanced a single case of a woman who died during the menstrual period whose ovary did not present a vesicle in a greater or less degree of development or else one already ruptured; these facts related by eminent physiologists are incontrovertible and this universal coincidence affords a strong probability of the relation of causality to be established and becomes almost a certainty when; Second, It is determined beyond question that the absence of the ovaries involves an absence of the menses. In the case of animals in whom

the experiment

the experiment has been repeatedly tried, not a doubt remains that the excision of the ovaries cause the disappearance forever of all symptoms of rut. Analogy alone would cause us to think also that after castration the function of menstruation would also cease. But though instances of the effects of the performance of this operation are happily very rare, we have some well authenticated and positive facts. One in particular is deserving of great appreciation as there can be no doubt of the validity of its authority. Percival Pott mentions a woman who had her ovaries extirpated, in whom the menses which before the operation had occured with the greatest regularity, never afterwards appeared; the breast which had been voluminous subsided she became thinner and assumed a more masculine semblance. Roberts, mentions some women whom he met in Central Asia who had been castrated, who presented no traces of puberty, never had haemorrhoidal flux, no epistaxis, nor

had they any

had they any sexual desires. Third, Admitting the incontestable parallelism between the symptoms of heat and menstruation; it is sufficient to prove that the former is always connected in animals with the ovarian evolution. Now, this fact is proved by experiments that do not admit of hesitation, Coste, has shown that in animals the females never enter into rut except when the preparation for spontaneous ovulation is going on in the ovaries, and that the venereal etherism continues throughout the entire duration of the process of evolution and ceases when the rupture of the capsule has taken place. And is is further known that whilst extirpation of the ovaries prevents the female from rutting; those which have been deprived of the womb but not of the ovaries lose nothing of the ardor with which they receive the male. Menstruation is therefore intimately connected with ovarian evolution and can not occur without it. We may therefore feel satisfied of the

existence of

existence of vesicular development every time they make their appearance. The uterine hemorrhage may however be wanting without preventing in any degree the regular progress of spontaneous ovulation which ordinarily precedes the sanguineous exhalation from the internal surface of the uterus. For this process may have its influence restricted to the ovary alone. Therefore though it is generally known that conception does not take place until the menses have been established, nor after their cessation; why and how are not known; yet we can not assume the absence of the menses a cause for denying an aptitude for conception, they are the sign, not the cause of fecundity.

The absence of the menses do not always produce sterility for science has many examples of girls who conceived before they had ever menstruated and of women who became pregnant notwithstanding a suppression which had lasted several months and longer, but women who do not

menstruate

menstruate are generally sterile because the absence of the menses or sterility is most frequently dependant upon a malformation or abnormal state of the genital organs. How to account for the periodical return of the menses has not been explained with any degree of satisfaction, some ancients and a few moderns attributed them also to the influence of the moon, but to prove its fallacy we need only recollect that a woman may be regular at different lunar phases or use in the space of several and did the moon exert its influence all women would be under its influence at the same time which we know not to be the case. We may regard the cause of ovulation in the human species recurring every month as one of the impenetrable mysteries of nature. But our ignorance on this point should occasion no wonder. Who can tell why a certain plant flourishes in a certain month in preference to another? Why a certain tree bears new flowers every

month

month or only in certain months? Why this plant has red flowers and that one white ones? Why some men are of large stature, others small? Why the animal is prepared for procreation every year in a certain month, and that one only once a year? When we cannot comprehend the end of a thing, shall we be surprised if the reason is unintelligible?

We now arrive at the last point which we have to consider in speaking of phenomena, the duration of the menses. This age is as variable as that of their appearance. From the best statistics the menses in their natural order shows close between the 40th and 50th years in our temperate climes. Between 30 and 40 in warm climates and from 45 to 50 in the colder zones. Thus their whole duration is near 31 years everywhere; Where they are most precocious they disappear sooner and where their appearance is most tardy they are also prolonged

prolonged to a greater period of life; that is where the precociousness is due to climate; for Raciborsky and other able physiologists think that precocious menstruation is often due to an excess of vital power in the individual, and that, exceptional circumstances excluded, the influence of this vital activity is felt later in life and prolongs the aptitude for procreation in the female.

We think it unnecessary to dwell upon those cases where individuals have menstruated without inconvenience up to their sixtieth, seventieth or seventy-fifth year; or upon those in which it is said having once ceased they reappear again at 80 or 90 or as Blancardi reports even at the advanced age of 150 years. But as Desormeaux aptly remarks though these kinds of returns are not very rare at 60 or 70 years; they should rather be considered as morbid and the token of some disease, than as the resumption of the catamenial function. In the same manner as certain plants sometimes

flourish

flourish again in autumn after having withered at the close of spring; so also, a woman may under certain circumstances return, as it were, to her young age again just as she is reaching the decline of life; it is a last effort of nature to restore a more prosperous season but which only serves to hasten that dissolution which she in vain attempts to retard. This change of life is marked by nearly as great a revolution as that which stamps the appearance of the menstrual function. The cessation of the menses, and of the vesicular evolution of which they are the epiphenomena; produces in the generative apparatus and entire organism a wonderful change and effects the opposite of those which their first appearance determined. The gradual disappearance of the charms of puberty, the bosom and cheeks become flaccid, the form loses its rotundity, becomes more angular, the skin is wrinkled, appears as if too large and loses its

delicatness

delicateness, the eyes sink in their orbits, the rose-blush of the cheeks is supplanted by a yellow tinge, the ruby color of the lips yield before the leaden hue, the ovaries become atrophied and diminish in size in every direction, the Graafian vesicles are absorbed and waste away and the womb is contracted and its cavity almost effaced. Every circumstance proclaims, the season of her pleasures is past and the winter of her life is fast approaching and nature wise in her actions has ordained that the genitals should lose their power of excitement at that period when woman can no longer afford nutriment to her offspring. Their cessation seldom takes place suddenly, but it is almost always announced several years in advance by more or less irregularities.

The return of the menses suffer postponement. Sometimes they are marked by a diminished discharge or by a profuse flow of blood. A mucous flux of a yellowish-white color is established, finally a general and indefinite feeling of uneasi-

-ness

ness, lassitude, sense of suffocation, lumbar and pelvic pains, colics, itching of the genitals, sudden alterations from heat to chilliness and vice versa, with profuse perspiration are added to the local phenomena above indicated.

In most cases all of these troubles are slight and disappear promptly, but in some instances deseases before latent then declare themselves; it is this fact that has given rise to the erroneous opinion that to this period the term 'Critical age' was given in reference to the dangers by which women are at that period surrounded. But the statistics furnished by Morét, Finlason and others, show that the mortality of women between the ages of 40 and 50 years, is not greater than at any other period of life, nor greater than that of men. In some cases the 'Age du retour' is marked by none of these unpleasant sensations: and the health before precarious becomes confirmed, The individual feels strong, obesity is produced and nothing but benefit to the

General.

general health is derived from the cessation of the Menses.

Before drawing to a close, this my maiden medical Thesis; it is but meet that I should extend, unsolicited testimony to and present my thanks for the unmitigated attentions and the many civilities I have received at the hands of my respected preceptors, the Faculty of the University of Maryland. To my first preceptor Dr Louis C. Eichelberger I take this opportunity of offering my greatful and sincere thanks for the many favours and courtesies he has shown me. To my companions also do I owe an acknowledgment for the many acts of friendship they have conferred upon me as we pursued the paths of science together. Pleasant reminiscences of happy moments spent in my alma Mater, will ever form a bright spot in my memory and sometimes serve to

cheer

shed a sunbeam of happiness amidst the cares
and troubles of a professional life.

"Ante, leves ergo, pascentur in æthere cervi
"Et freta distinent nudos in littore pisces;
"Ante, peserratis amborum finibus, exul
"Aut Arabs Parthus bibet, aut Germania Tigrim,
"Quam nostro ipsorum labatur pectore amor."

An

Inaugural Dissertation

on

Intermittent Fever.

Submitted to the Examination

of the

Provost Regents and Faculty of Physic

of the

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for the degree of

Doctor of Medicine.

By

Robt. G. Blagett.

of

Maryland.

March 1st 1863.

Intermittent Fever.

Contemplating this as a subject for a thesis; the first questions which naturally arise, and which should first be considered before the subject itself, are - What is fever? and - How is it distinguished? And in answering these questions, as well as treating of the subject itself, I can lay no claim to originality, but borrow from Authors and Preceptors, to increase the very limited knowledge which I possess of them.

Fever - Febris - from Fervor heat; - is one of the most frequent and dangerous affections to which the human body is liable. It is an acute affection of the system, in which all the functions are more or less deranged; the most striking phenomena being sensorial, or nervous irregularity, increased frequency of

pulse, increased heat, and disinclination for food. It is a state of the system following languor & weakness, with- or without- primary local disease. It is not characterized, however by any one, but depends upon the coexistence of many symptoms. In fact fever is an acute affection of the system in which all the functions are more or less deranged. Of the phenomena of Fever - of which there are four stages - First the forming stage - Second Cold stage or Chill - Third stage - Fourth the declining stage - Of the duration and course - of the different grades of the relations, - the causes - theories and nature of fever, I shall touch upon, in the description of the principle subject - Intermittent Fever - Intermission - from the two Latin words - inter - between - and mittere - to send - gives us at once the direct-

significance of the term Intermittent Fever which differs from Remittent fever - in that the one has distinct intermissions or intervals, whereas the latter has exacerbations or increase and diminishing of febrile action.

This disease, the common Fever and Ague, is characterized by general febrile symptoms or rather - febrile paroxysms recurring at regular intervals, and by the absence of fever between the paroxysms; each paroxysm commencing with chills and ending in free perspiration, and the intervals which are protracted, are marked by perfect freedom from fever.

There are types of this fever which must necessarily be noticed. Ordinarily there are three types, - the quotidian, - tertian and quartan. In the former the paroxysm occurs every day, the interval being generally

about twenty four hours. In the second the paroxysm recurs every other day with an interval of forty eight hours, and in the latter or quartan, every third day with an interval of seventy two hours. Other types are mentioned by Authors, but are of so unusual a character that Prof. Wood doubts their ever having seen any of the quintan- sextan- septan or octan types, at least they are of very rare occurrence).

Nevertheless there are numerous diversions to the above named. Double quotidian, double tertian, triple tertian, double quartan &c.- the names of which sufficiently demonstrate the periods of the different paroxysms; but the double tertian is the only one of frequent occurrence; in which it appears that two tertians are going on at the same time, but at different

periods in the twenty four hours; with a daily paroxysm, but occurring at different periods, or with different characters on successive days, the paroxysms of alternate days corresponding with each other.

The premonitory symptoms of this disease are. Great lassitude, frequent yawning and stretching, uncomfortable uneasiness of the whole body, or debility, and aching in the loins and extremities, accelerated pulse &c.

Each paroxysm of an intermittent is divided into three marked stages, the cold, the hot and the sweating stage, which succeed each other as mentioned; and if attention is paid to the disease in the first stage it may generally be arrested.

The Cold Stage is characterized by a sense of chilliness, with feelings of

languor, cold hands and feet; with chilly sensations along the spine, accompanied with headache, and generally there is a bluish tint of the nails, and the patient gets chilled and crowded upon himself; his ideas pass rapidly through his mind, and his attention is with difficulty fixed; the teeth often chatter (tremble), the bedstead is often shaken with the violence of the involuntary movements; which tremors are denominated rigors. The surface is usually cold to an observer, but this is not always the case, sometimes it is hotter than in health, even when the patient feels very cold. The surface is generally pale and frequently presents a rough appearance, known under the name of goose flesh. There is much oppression about the praecordia; the appetite

is squeamish, the pulse loses its activity, becomes small, contracted, frequent and firm; the countenance is changed, the features shrunk, the eyes dull and hollow, the cheeks livid, the respiration is hurried and depressed the secretions are generally scanty; but the urine is usually pale limpid and copious. The nervous system is much disordered, sensitionally there is drowsiness, which sometimes though rarely, deepens into stupor or even coma.

The duration of this stage varys greatly, but averages about an hour.

The hot stage, immediately follows the cold, without any distinct interval. Rigors for a time alternate with flushes of heat, which are rather agreeable than otherwise, gradually the whole surface becomes hot and

dry, and the temperature is raised above the natural standard to 105-& 110 degrees Farenheit; the countenance is flushed and turgid and this increase of temperature is not only confined to the sensations of the patient, but the heat of the body is positively increased. Now the urine is scanty and high-coloured, and sometimes there is great pain in the head and extremeties. There is utter disinclination for food and occasionally nausea and vomiting, the pulse is more frequent than in health, and usually full and strong. In some cases however it is but once frequent and feeble, according to the state of the system.

This stage generally lasts, according to "Wood" from two to eighteen hours.

In the sweating stage. perspiration generally appears first upon the

face, breast, arms, legs &c. & gradually spreads over the whole surface, sometimes it is slight: occasionally very profuse. It affords relief to the patient; and the fever abates, as perspiration advances.

The skin becomes cool, excitement abates, and the patient frequently falls into a deep sleep, from which he awakes free from fever. This stage lasts from three to four hours.

The duration of the paroxysm varies greatly, often it does not exceed three or four hours, but sometimes it runs on to twenty or about time of the succeeding paroxysm; the average duration in the quotidian may be stated at ten or twelve hours; in the tertian at eight or ten hours, & in the quartan at five or six hours; but there are often diversities to these.

After a paroxysm the patient is frequently

enabled to return to his duties, though a feeling of langour and weakness still exists. The interval between the paroxysms is called Apyrexia. During this period of intermission he is not free from disease, his countenance is sickly, and his mental and bodily powers are excited with difficulty; the appetite is bad and the digestion is carried on indifferently.

The tertian and the mildest quartan are the most severe. Intermittent growing worse becomes remittent; when remittent growing better becomes intermittent.

There are often local complications; the digestive organs are sometimes inflamed and there is a burning sensation felt, but if the liver is affected the symptoms are the same as in Hepatitis.

In tropical climes Diarrhoea or Dysentery is present. If the spleen is complicated we have symptoms of Splenitis. Congestion of the lungs occasions that humid, asthmatic breathing often noted in this disease.
The brain may become affected occasioning delerium, comatose, convulsions &c in Children. Death often occurs in the cold stage from congestion.
The prognosis is favourable; most cases with proper hygenic treatment, can be ultimately cured, without the use of medicines, although not so soon.
The Diagnosis is generally easy; the only diseases with which it is confounded, are hectic and remittent fevers; but as hectic fever may be easily distinguished by the irregularity of the recurrence of the paroxysms, as well as other diagnostic symptoms.

well known, it will be more easily distinguished from this than from remittent; from which it can not sometimes be diagnosed, or it is at least very difficult to decide, whether the case belongs to one or other variety. But the practitioner may be aided greatly in his diagnosis, by the prevalence of the epidemic, by the exposure of the person to the peculiar miasm, and by the habits &c of his patient. The exciting causes, are marsh miasm or malaria. Of the precise nature of miasmata nothing certain is known. It is worthy of notice that those who are closely confined in Cities, never or scarcely ever suffer from this Epidemic; and it is said that the smoke of camp fires in armies is rather a preventative, but after the painful experience of the Federal army during the Peninsular Campaign, where not only camp fires,

but also a most extravagant use of Quinia was tried as preventatives; I can but think, that neither fire nor smoke are specifics as preventatives. There is no doubt of the usefulness of Quinia but in the above instance there seemed to be a fatality, totally unaccountable by some, easily by others.

The indications for treatment are, 1st To abate the violence of the paroxysm and 2nd To prevent its return. The first indication requires the adoption of the general principles and remedies required in ordinary fever. The second and the most important, the period of apyrexia, is that for action.

The first thing that should be attended to is the removal of the patient from malarious influence. During the paroxysm;- in the cold stage, warm applications and opiates will shorten it.

When the chill has commenced, give the patient hot diluent drinks, such as lemonade, toast water, or infusion of balm; hot infusions of Eupatorium perfolatium are useful; friction should be made use of, warmth applied externally, by means of hot pediluvia, heated bricks, bottles of water &c. An excellent remedy and especially when there is much pain or nervous disorder, is a grain of opium or an equivalent dose of one of its preparations. This sometimes shortens the chill and moderates the subsequent fever, at least it oftens affords great relief to the patient. If the stomach is irritable the anodyne may be given by the rectum, and when so employed the Tr. Opii should be administered with thin starch.

When there is great and threatening prostration of strength, stimulants

both externally and internally, should be used, the carbonate of Ammonia, the oil of Turpentine hot, Cayenne pepper boiled in brandy. &c should be applied by friction to the upper and lower extremities; Mustard cataplasm warmed, may be applied to the inside of the thighs, & over the epigastrium; Mustard applied to the Spine has often had a most beneficial effect.

As internal stimulants, the alcoholic drinks are objectionable, on account of their tendency to affect the head injuriously, after reaction has taken place, but sometimes it becomes necessary to have recourse to them, especially in cases of persons who are accustomed to such stimulation. Ether is often used on account of the rapidity and brevity of its action. Bloodletting has often been recommended; but as there are other means of obtaining the same

results not so objectionable, the loss of blood when not necessary should be always avoided on account of its debilitating effects; and the disease is now generally cured without the use of blood letting, unless complications arise, when either general or local bloodletting becomes necessary.

Whereas the foregoing remedies may become necessary, nevertheless in the majority of cases, little or nothing is requisite:-

In the hot stage, the patient should be placed upon a refrigerant diet-or rather treatment, cool drinks should be allowed in such quantity as not to oppress the stomach.

The effervescing draught is a very fine remedy, given every hour or two; it soothes the stomach, diminishes fever promotes perspiration, and favours a solution of the paroxysm.

Tartarized Antimony is a very good addition, when there is no sickness of stomach, but if given at all in very small doses never enough to produce nausea.

In this stage little is necessary to be done unless complications arise; but if symptoms of organic disease supervene, there would be necessity for abstraction of blood, either locally, by leeches or cups, or by general bloodletting; together with blisters and other counter irritants.

When there is a feeble condition of the system and especially when the fever seems to be of the typhoid form, Dover's powder is an excellent remedy in the dose of ten grains.

Irritability of stomach is allayed by the effervescing draught, or by small draughts of carbonated drinks, carbonic acid water &c.

The room in which the patient is should be well ventilated. It is sometimes useful

to sponge the body with cold water; correct constipation if any, and if vomiting a plaster over the epigastrium should be applied or Opium should be given.

When the hot stage has subsided it would be well to favour the sweating stage by the usual diaphoretics.

In the sweating stage, nothing is requisite to be done, but to take care that the patient be not exposed to cold so as to prematurely check the discharge, but if there is much debility stimulants should be freely used.

The Intermission is the time for the effective treatment of this disease.

The indications are to cleanse the system and correct any coexisting organic diseases, and use the most strenuous means to prevent a recurrence of the paroxysm. The bowels should be thoroughly evacuated, and then-

Sulphate of Quinia should be freely given. Calomel is generally considered the best cathartic in the dose of from five to fifteen grains, but it is best combined with Rhubarb. Jalap, Scammony, or Colocynth, or alone and followed by Castor oil.

Fowlers solution and Quinia will prove effective in preventing the return of the Paroxysm.

Quinia Sulphas should be given in doses of from three to five grains every one, two, or three hours during the apyrexia. If the intermissions are long, small doses should be given, but if short large doses. If the paroxysms are severe give large doses of the Quinia just before their return, say from ten to fifteen grains; and in most cases it would be well to combine it with blue Mass.

If the remedy conquers the disease it

must be continued for ten or fifteen days after all symptoms have disappeared. If the Quinia should be rejected by the stomach, combine it with Opium. In very severe cases give at the proper time twenty grains Quinia with thirty or forty drops of the Tr. Opii; if the stomach will not bear it give the quinia by enema fifteen to twenty grains in a starch mixture.

Sometimes unpleasant sensations are felt from the use of Quinia as buzzing in the ears, when such is the case the use of it should be stopped until this ceases.

Fowler's solution must be used if Quinia fail; in doses of from ten to twelve drops in combination with Tr. Opii, every 3 or 4 hours.

Salicine and extract of willow has similar properties to Quinia. Simple bitters in infusion are sometimes useful in

Intermittents. Sulphate of Zinc is sometimes successfully used in doses of from two to twelve grains, combined with cinnamon, capsicum or in pill.
Other remedies have from time to time been made use of in this Epidemic but I believe that Quinia is considered the Specific.
External friction and stimulants, should not be out of place when the disease has subsided; then, if there are any, we should proceed to the complications of important organs, and to their removal, but as these complications should be treated according to the symptoms as they arise I will not lengthen this by their consideration here.
There is yet another remedy which I believe has lately come before the Profession, and the utility of which I have seen, and, with which I wish

here to occupy a few lines.
During an "Epidemic of Cholera" which occurred in 1853. in my Fathers practice. he freely and successfully made use of Strychnia and Oil of Turpentine combined; the Autumn following, he had numerous and obstinate cases of Intermittent-fever; measurably failing to cure with the usual treatment, it occurred to him;- the peculiar effect their combination had upon the skin in the cold Stage and incipiency of Cholera; itching, tingling and as he often told me, the patients would rub and scratch their bodies and even the nose and ears, and complain of Bed Bugs creeping over them; he adapted this remedy with the happiest results, and the more of this remedy he made use of the more he liked it, as much as it differed in its action from Quinine in that the latter,

even when it relieves; the fever has a a tendency to return, whereas the former in all those cases tried, gave permanent relief.

The formula used, was obtained from an Ohio State Medical Journal - which gave the following in the treatment of Cholera.-

℞

Strychnia gr. ß.
Ol. Terebinthi ℥ ii.
Mucilage - Gum Arab. ℥ viii -

Dose in Intermittents -

1 tablespoonful every half hour, commencing several hours previous to the appearance of the cold stage - & continued until the effects above named are produced.

This disease even if it produce not death; the effects are very unpleasant; producing that languid, woe begone looking appearance which generally accompany epileptics; and with all the sensations

are so indescribable; that the following has been written as descriptive of the same. The Author entitled his poem.—

"The hardest case on Record."

"He took the ague badly,
And it shook him, shook him sorely;
Shook his boots off, and his toe-nails;
Shook his teeth out, and his hair off;
Shook his coat all into tatters,
And his shirt all into ribbons:
Shirtless, coatless, hairless toothless,
Minus boots, and minus toe-nails,
Still it shook him — shook him till it
Made him yellow, gaunt, and bony;
Shook him till he reached his death-bed;
Shook him till it shuffled for him
Off his mortal coil, and then it
Having made him cold as could be,
Shook the earth still down upon him,
And he lies 'neath his grave stone,
Ever Shaking, Shaking, Shaking."

In closing this, my thesis,—

I can but mention the constant endeavours of my preceptors to impress upon my mind as well as all others, those rules and precepts which are essential to all practitioners. Your attention forbearance and kindness can never be erased from the memory of any student; and in the trials of a practitioner's life, thoughts of your kindness, as well as the many pleasant moments spent with associates here formed, will serve to cheer the hours of trial, which I can no less expect to encounter than others.

R. G. C.